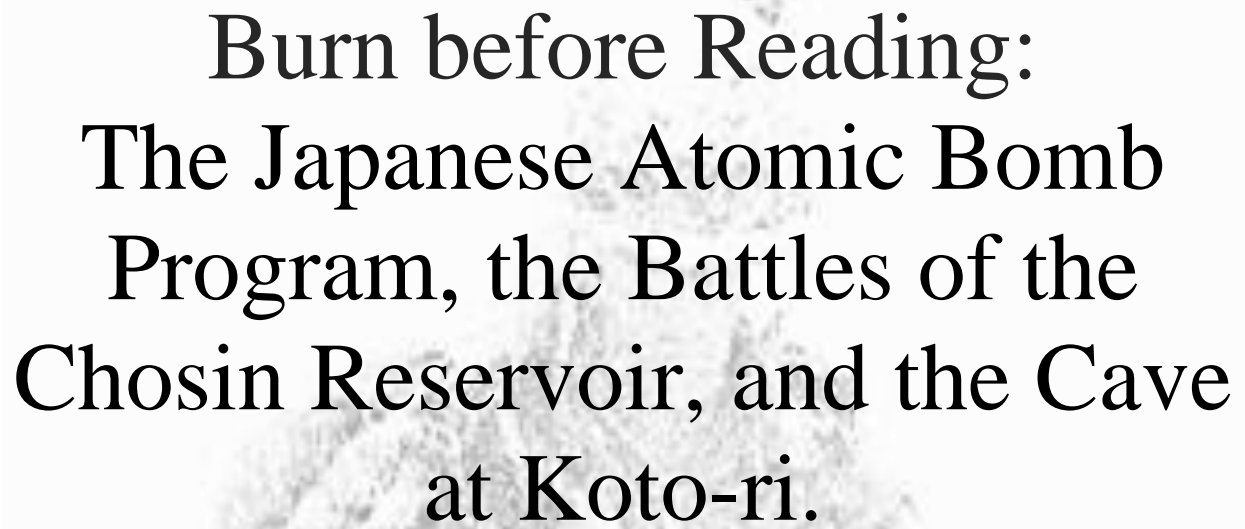


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Burn before Reading:
The Japanese Atomic Bomb
Program, the Battles of the
Chosin Reservoir, and the Cave
at Koto-ri.

The Cell.

Dwight R. Rider

Draft

“The higher the headquarters, the more important is calm...nothing is ever as bad as it first seems.”
General Joseph Stillwell.

"If everybody is thinking alike, then somebody isn't thinking."

George S. Patton Jr.

“The task of government in this enlightened time does not extend to actually dealing with problems. Solving problems might put bureaucrats out of work. No, the task of government is to make it look as though problems have been solved, while continuing to keep the maximum number of consultants and bureaucrats employed dealing with them.”

Bob Emmers

Draft

Foreword

The conflict that became popularly known as “The Korean War” (but was never truly a declared war nor did it end) was one that I experienced only vicariously, as I was a few months underage for the draft or enlistment when it entered the perpetual truce phase. Still, through newspapers and radio, as well as having slightly older friends who went “over there,” I was as immersed as one could be without wearing the uniform. These avenues of input were woven into my novel about a man of a little older than my age who served in WW-2 and Korea, two conflicts that imprinted me deeply.

My son was in the Air Force during the end of the Vietnam era, a period that highlighted the end of an era in which the USA actually won wars. My and my wife’s admiration and support for military men and women in every struggle continued despite our belief that our country should not enter any foreign war unless our leaders had good reason and full resolve to obtain total victory. This stance began during the mistakes we saw in the Korean strife and has been strengthened by worse ones ever since.

Of course, mistakes, errors in judgement and worse will always be black spots on the record of our wars both small and great. And it will always be true that “the victor writes the history books” but even then, much is covered up by highly-placed actors who modify the lines of the drama. “Official” histories and reports often hide or deny the truth of why, how, and what really happened. We should be thankful that front-line observers and excavators of facts continue to speak out. It is extremely important that such people—and Dwight Rider is one of them—be given shelf space in libraries both physical and electronic, and any other type of platform from which to tell more of the story.

Fred Lanting, Union Grove, Alabama

Draft

Preface:

What follows is not a history. What follows is not an attempt to re-write history. It is not an attempt to revise the history that has been written.

What follows is simply the reporting of, and an analysis of events that took place during the Korean War in late November, early December 1950 in and around the village of Koto-ri during the Battles of the Chosin Reservoir and how I became involved in that subject in 2003. What follows makes the history of the events which occurred while United States and United Nations forces were in North Korea, their advance, and subsequence withdrawal, more coherent.

This story recounts unreported events of 1950. It is an unknown, and heretofore untold story. The story attempts to relay the struggles that face intelligence analysts in understanding the unknown and uncertain; against a bureaucracy that, while responsible for the safety and security of the United States, only jockey for more money to build empires and support the advance of technologies that produce few results. The story is not an argument awaiting future information, but a recounting of what was in 1950, and the events myself and other intelligence analyst encountered beginning in 2003.

What follows is a product of intelligence analysis, specifically targeting intelligence.

Lacking perfect information in the form of official reports and documentation, it is possible that everything revealed and discussed herein is entirely wrong. Corrections await perfect information.

A special word of thanks goes to Fred Lanting for his editing and review of this paper. His singular effort has tremendously improved the value of this document and the story it reveals.

Burn before Reading: The Japanese Atomic Bomb Program, the Battles of the Chosin Reservoir, and the Cave at Koto-ri. The Cell.

As with most intelligence analysis, the locating of what was most probably the cave where in August 1945, the Japanese assembled their reported atomic bomb, is due as much to serendipity than anything else. Its identification lay at the end of a chain of uncontrolled events where bits of information and data came together and culminated in experiences that would change my life forever. My journey began in 2002 when I resigned from the Defense Intelligence Agency (DIA) to become a Defense Contractor in the wake of the events of 9-11. I was tenacious, persistent and probably a bit more self-righteous than I should have been. I could be caustic, controversial and for those with less vision, difficult to manage. I did not then, and still do not tolerate fools lightly. After becoming a defense contractor, I learned to moderate my enthusiasm for the issues I worked on, and especially my comments when facing government officials who could terminate your employment with or without cause.

Prior to DIA I had previously served 21 years in the US Air Force as a targeting intelligence specialist and later as an electronic warfare officer (EWO), retiring from the military in 1995 and beginning work as an intelligence analyst at DIA that same year. I served at DIA as an electrical power systems analyst and underground facilities researcher,



Nichitsu; portions under construction in the 1930s.

specifically working on North Korea, for about six years. In the wake of the events of 9-11, I found that defense contracting offered greater flexibility and was less confining than working directly for government and left the agency. Few of us who worked within the intelligence community (IC) would realize until much later how the events of 9-11 had changed that community, and for the worse. As the program manager of the company that hired me said, “The happiest day in your life will be the day you leave the government,” and he was right.

My first job as a contractor was with the DIA’s counterterrorism cell,

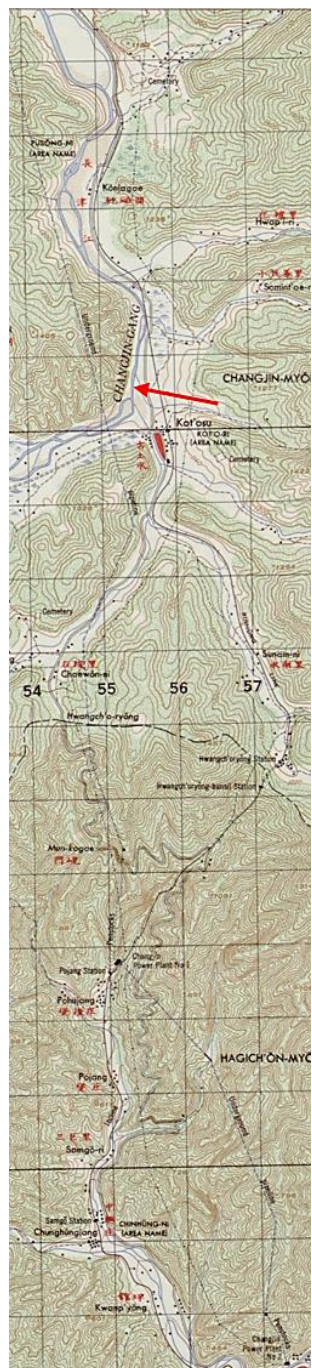
but I was soon asked to take a position working North Korea in an intelligence fusion cell. The cell had been established after 9-11 as one of the many innovative efforts designed to track terrorists. As events developed, there were many similar such cells across the government and the military – in fact too many.

As the existence of other such cells became more apparent, the director of the cell in which I served, sought to redirect our work to the issue of nuclear weapons, more precisely against developments on the Korean Peninsula. As I had worked primarily on North Korea for the last six years at DIA, I was somewhat known in the IC for my knowledge and expertise on that country and was brought to the cell to put that knowledge to good use.

I had first served in South Korea in 1976, lived in the country from 1986-1990 and visited it continuously from 1990 to 2006. I could read the language (Hangul), and was familiar with that nation’s history, social norms and culture. Most of my adult life had been spent either working somewhere in Pacific-Asia or in targeting the former Soviet Union (FSU). I was thoroughly familiar with Southeast Asia, Japan and China. After several weeks with the unit, in which we also dealt with the first few months of the Gulf War, the director of the cell took me aside and charged me to “be the biggest pain in the ass of the IC on the matter of WMD (weapons of mass destruction) worldwide” as possible. Though the contracted program management was not altogether happy with the direction I was given, I intended to fulfill the orders of the government.

The director of the group believed the IC needed to be shaken up and forced to admit the gravity of the situation with WMD; chemical, nuclear, biological and missiles, worldwide. As North Korea was politically, financially and socially isolated, it was considered the most difficult target to work. These orders had followed George Bush’s 29 January 2002 State of the Union speech, where he labeled Iraq, Iran and North Korea as the “Axis of Evil.” Bush labeled North Korea; “A regime arming with missiles and weapons of mass destruction, while starving its citizens,”

and as events unknown to this day even within the IC were to prove, Bush was far more correct than he initially appeared. Bush's actions in the aftermath of the attacks of 9-11; the attack on Afghanistan and later Iraq, were to lead ultimately to the end of our program as more information was now desired before any action would ever be taken.



During the Clinton Administration, under the Agreed Framework negotiated by former President Jimmy Carter with North Korea, Pyongyang had agreed to halt its construction of graphite moderated nuclear reactors, in return for two South Korean-built light water reactors. The bureaucracy of the time “assumed” that since North Korea was building reactors and lacked sufficient energy to power its industries, that the Pyongyang regime was more interested in solving its energy problem through nuclear power than in pursuing nuclear weapons. The North Koreans were never actually concerned about their failing industrial base. Pyongyang was never after electrical power and Washington did not offer the North electric power plants. US intelligence analysts mirror-imaged their concerns over North Korea. In the end US negotiators forced the light-water reactor deal upon an unreceptive Pyongyang, unwilling to admit that North Korea was indeed seeking a nuclear weapons option.

In the aftermath of the fall of the Berlin Wall and collapse of communism, South Korea and Japan were to fund and build the new reactors. US negotiators had persuaded themselves that in the coming collapse of North Korea, such reactors would ultimately assist Seoul in rebuilding the former communist state. As the bureaucrats ensured, any evidence that North Korea was cheating on the agreement would be hidden behind various special programs located within the intelligence community. This was necessary to prevent Congress who had to approve the deal and South Korea and Japan, who were paying the financial bill for the agreement, from finding out that North Korea was not adhering to the Agreed Framework. The can was therefore being kicked further down the road, but at tragic costs to the eventual credibility of the IC and possibly this nation.

In his efforts to leave a positive legacy, Bill Clinton had politicized the IC. It had once been the role of the IC to be the bearer of bad news. The IC was created to present information gathered, the good and bad, to elected officials whose job it was to decide the importance of that information to the country. Once politicized, the bureaucracy saw its role as a filter against what it thought the president needed to hear. The Clinton Administration wanted plausible deniability, not responsibility. The administration did not want to know if North Korea was cheating on the Agreed Framework, the IC co-opted itself by becoming the filter of information and not the reporter. Government bureaucrats previously appointed by President Clinton now came to believe in the aftermath of the invasion of Iraq, that, as President Bush would deal decisively with any issue, it was within their duty to prevent knowledge of such problems from reaching the president's desk. Clinton did not want to know, so the bureaucracy did not tell him; that same bureaucracy was later afraid to tell George Bush as he *would* deal with it, and was subsequently afraid to tell Barrack Obama because he *wouldn't* deal with it at all.

In establishing our research effort our director believed that “competition” within the IC; another group looking at the problem in a “Red Team-Blue Team” fashion might bring about positive change. We were to be aggressive.

In the weeks that followed the directions given, the director held a meeting within the group and explained that he believed was – the forerunner or precedent of the current North Korean program was the Japanese World War II (WWII) era research program on atomic energy and weapons as it existed on the Korean Peninsula in 1945. While I was familiar with WMD and had done quite-a-bit of previous work on the subject, mostly with biological and chemical weapons, neither I nor any of the others in the cell could claim to be a nuclear “expert.” We were on the entry side of the power curve looking up.

Although I had read Robert Wilcox's book on the subject *Japan's Secret War: Japan's Race against Time to Build its Own Atomic Bomb*, about the Japanese and their wartime atomic energy and weapons program, I knew we had a long way to go to get the effort on its feet and make progress.¹ Unbeknownst to me at the time, some of the analysts

¹ Wilcox, Robert K. *Japan's Secret War: Japan's Race against Time to build its Own Atomic Bomb*. Marlowe & Company, New York. Copyright 1995.

previously assigned to that same cell had accomplished some preliminary archival research on the subject at the US National Archives in Adelphi, Maryland. I had not, at that time, met these analysts nor did I know the depth of their research. Their work represented an unknown quantity.

As I was to determine later, their research effort had been far more flexible on its direction, and had extended into the German wartime atomic research effort in addition to the Japanese program. Unlike their effort, our effort was far more disciplined in its direction. We collected and examined some archival information on the German program, but resisted any tangential research along any path that might not directly add to our understanding of exactly what the Japanese had or had not accomplished during the war. As our work at the National Archives was more limited in time, and further limited to producing Xerox copies of previously released top secret and secret documents, we accomplished little along that path.

Our efforts at the National Archives were severely limited as the immediate results desired, required less historical accuracy. At some later point, I retraced the previous research on my personal time, and expanded my own knowledge of the records held there concerning the wartime Japanese research program on atomic energy and weapons. My dime, my time, no conflict of interests.

My work at the National Archives extended from the period when researchers were only allowed to make paper copies of previously released top secret and secret documents, to scanners and later digital cameras. What we had previously accomplished over a period of weeks, I now accomplished in a matter of hours. Where we were once only capable of copying several hundred documents over a month's time, my part-time effort allowed me to accumulate some 31,000 images of pertinent documents now stored in more than 300 softcopy folders. Over the course of the research I accumulated more than one thousand books, memoirs and photographs of the people, places and events covering the years 1938 to 1951. The work was also conducted during a period of time when there was intense interest on the part of the Bush administration about any progress that North Korea might be making in their nuclear weapons program.

In October 2002 North Korea had reportedly acknowledged that it possessed a secret uranium enrichment program. The North Korean admission prompted an extensive effort on the part of the IC to locate and identify any clandestine facilities or installations possibly linked that country's uranium enrichment program.² An effort in which ultimately, the IC failed. There had also been, for years, suspicions that North Korea had clandestinely installed a nuclear reactor somewhere within its territory to produce plutonium.³ If North Korea had installed such a reactor, rest assured that it would not be found by the US intelligence community.

It was similar such suspicions that ultimately led to the IC to misidentify the large-scale underground facility at Kumchang-ni as a potential clandestine reactor, despite its lack of valid signatures, confirming its inept analytic assessments. The complex matrix they created to justify their claims, consisting of partial information, objective and subjective data and few facts, was not open to criticism. Those with a wary eye were not welcome to raise objections and were excluded from the analysis. In the end, it was the North Koreans that dictated future US policy as the failure of the IC to locate such facilities left policy-makers in ever-worse negotiating positions.

According to Park Hak-soon writing for the Sejong Institute "What the Clinton Administration intends to show the Congress and the hawks is that North Korea has not violated the Agreed Framework. This maximum gain is secured if the underground site turns out to be completely free of any traces of nuclear materials and activities. For the minimum gain, however, the United States need not get such perfect results. If the underground site turns out to be not nuclear-related, what the Clinton Administration needs for the minimum is just to demonstrate that the past activities at the Kumchang-ni site cannot be proven or determined with the inspection technology currently available."⁴ In misidentifying Kumchang-ni, the IC exceeded the already low expectations set for them. Inside the beltway the answer was obvious: more investment in advanced technology to prevent human error, less emphasis on common-sense, and fewer demands on analysts to perform the tasks assigned.

The subsequent visit to an incomplete and basically empty large-scale underground facility caused the US much embarrassment, in addition to the \$300 million in food aid that lined North Korean coffers.⁵ I was fortunate in that I was out of the country during much of the self-back-slapping congratulations that prefaced the ill-advised visit to North Korea. As I was not a "team player," I had been largely excluded from the analytic "group grope" that marked

² *North Korea and Nuclear Weapons: The Declassified U.S. Record*. National Security Archive Electronic Briefing Book No. 87. Edited by Robert A. Wampler. April 25, 2003. <http://nsarchive.gwu.edu/NSAEBB/NSAEBB87/>

³ Sanger. David E. August 16-22; *Underground Site May Hide North Korean Nuclear Reactor*. The New York Times. Published: August 23, 1998. <http://www.nytimes.com/1998/08/23/weekinreview/august-16-22-underground-site-may-hide-north-korean-nuclear-reactor.html>

⁴ Paik, Hak Soon. *The Kumchangni Inspection and Perry's Visit to North Korea.*, Sejong Institute, Policy Forum Online., Nautilus of America/The Nautilus Institute. 1999

⁵ *North Korea gives U.S. access to suspected n-weapons site*. Published: Wednesday, March 17, 1999. Lubbock Avalanche-Journal. http://lubbockonline.com/stories/031799/wor_031799095.shtml#.VspxPJwrKM8

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analysis of the underground facility identified. The visit to an empty hole was to also play a part in shutting down our research effort in the “one mistake environment” that followed the Kumchang-ni fiasco and similar failures to locate publicly nuclear weapons facilities in war-torn Iraq. Such suspicions however continued to exist some years later, as North Korea supported Syria in constructing a clandestine graphite-moderated reactor that was eventually destroyed by Israeli airstrikes in 2007.⁶



US Marines advancing into the hills opposite Koto-ni in November 1950. Note the H-frame 66-kV towers atop the hill

That the IC failed in the late 1990s and the following decade in its effort to locate such facilities in North Korea, Burma, Pakistan and Iran is telling in light of the advanced technologies put forth to aid their identification. The government employs many analysts, but few rise to the great challenges facing this country. Of those employed that do become great analysts, there are few paths to higher pay as great analysts are rarely moved into positions of authority; no manager, government or civilian, wants to lose his best assets.

Quite the contrary, those hired as analysts who lack talent are usually promoted to become managers of those who do. It was the Dilbert Principle ran amuck, where “the most ineffective workers are systematically moved to the place where they can do the least damage: management.”⁷ Many of those that fronted the Kumchang-ni group were eventually promoted to high managerial positions. Good knowledge of current baseball scores, participation in fantasy football and great social skills lead one to the top of the IC pyramid, not excellence in analysis and performance of assigned duties. Training programs within the IC add little; classes are held but the participants are never tested in a “go/no-go” fashion. Testing was anathema; all who enter pass. Analysts are informed, not trained. As for technologies, while the investment in technologies has given rise to a few great intelligence successes, such as the Cuban Missile Crisis of 1962, the promise of those technologies has never been realized. The continued costs in capital to the nation have rarely been justified to the American public. As for analysis....

Intelligence work is similar to journalism or police investigation, where a reporter or police officer develops a list of sources and acquaintances who can provide him unknown information on the subject he might be working. In researching events that occurred some fifty years earlier, it represented the search for elusive clues and small tidbits of information; leftover scraps of from the plate of history. Within the IC at the time, we called our list of sources “the Golden Rolodex.” In explanation, we worked at a time when analysts were still in the process of moving from paper to softcopy, and many continued to rely solely on their day-planners to guide them to the information that they required. Good analysis requires the tenacity of the police investigator, as one might be assigned to a subject who

⁶ *The Iran-North Korea Axis of Atomic Weapons?* 13th August 2015 - Forbes. <http://www.defenddemocracy.org/media-hit/claudia-rosett-the-iran-north-korea-axis-of-atomic-weapons/>

⁷ Adams, Scott. *Manager's Journal: The Dilbert Principle*. The Wall Street Journal, 5/22/95.

takes years of experience working with, to form solid conclusions. Score is kept by identifying that one next clue; that next piece of information, which a policy-maker can trust to make the necessary decisions that affect the county's future. Unlike law enforcement, in intelligence work, the bad guy may never go to jail, and ultimately success is measured by bombs on target.

As we began the work on the North Korean nuclear problem, using my Golden Rolodex, I reached out to friends and acquaintances within the IC, requesting they provide me any information they might come across suggesting a large underground facility with access to industrial-level electrical power.



The penstocks extending south to Changjin Hydroelectric Power Plant Number 1 near the Funchilin Pass. November, 1950

Though there are many hundreds of individual signatures that can work to the solid identification of such facilities, as I was to subsequently learn, the IC as a whole relied only on two; access to electrical power and a source of fresh water. Despite the availability of information on the US wartime Manhattan Project, no one could quantify the requirements for either. The term “vast amounts of electric power and water” became the mind-numbing reply to my numerous inquiries as to specifics. Analytic knowledge on the subject was miles wide, but only inches deep. There were no real “experts.” There was no one who could accurately describe what I should be looking for I strained my eyes examining many square miles of imagery coverage taken over North Korea, Burma, Iran, etc.

Research into the Manhattan Project was to subsequently prove that while access to electric power was a given; access to redundant sources of electrical power produced by separate and independent power producers was a necessity. There had to be redundancy in the number of power lines extending into a facility, and there had to be redundancies in the sources of that power. Any loss of power to the equipment employed in uranium enrichment could be near catastrophic. It wasn't long in my quest to locate such an underground until a friend in another agency advised me of just such a facility near what became known too much of the world as the Chosin Reservoir, near the town of Koto-ri, at 401720N1271741E.

As it was an extremely isolated, but secure location, it lay in an area rarely imaged over the years. There were no large military targets and installations located nearby. This meant that not only was it rarely imaged directly, there was little chance that there was any bonus imagery; film collected on some more significant location nearby, where this facility might show up along the edge of the collected image.



Electric power lines south of the Chosin Reservoir – Official US Army Photo – November 1950 – See Inset

The Chosin Reservoir had been built by Nichitsu (the Japanese Nitrogenous Fertilizer Company) under Shitagau Noguchi in the 1930s to create electrical power for his vast electrochemical works located at nearby Hamhung. In the mountains northwest of Hamhung, Japanese engineers built a series of dams to force the northward flowing Changjin River to flow south. The reservoir's water was forced into an underground aqueduct feeding a series of power stations; a cascade where water exiting one plant feeds the next in series. The spoil (rock) removed during the construction of the aqueduct was used to line the western bank of the Changjin River as it flowed north to feed the reservoir and as fill for the dam constructed further north. During the construction of the aqueduct, six entry tunnels were built to access the main water tunnel to remove spoil. At least two of those access tunnels remain in service today. The power stations themselves were located along the east face of the Jangbaik Mountains, south of the reservoir. The underground aqueduct passed only several hundred feet west of the identified underground facility, perhaps supplying any need for water within the underground facility previously noted. The aqueduct ended just north of the first power station in the

Changjin Cascade where the water entered a set of penstocks; pipes, feeding water into the power plant. For whatever reasons, whether it was the scenery of the local area or the importance of the undertaking, Noguchi himself had built a villa in the area. Villas being what they are, the structure may have only contained several rooms, and we never identified its actual location during our research into the area. Koto-ri itself however, was the scene of heavy fighting during the withdrawal of US forces from the area of the Chosin Reservoir, as the survivors of those battles would later attest and subsequently date, the existence of the cave into November 1950.

The analyst reporting the anomalous facility was unable to add the location to the IC's databases. Those databases are managed by standard-operating-procedures (SOP) that date to the theories of General Billy Mitchell in the 1930s, and the bombing lists compiled by the US Army Air Corps during WWII and the Korean War. Though decades later, while technologies had improved our ability to accurately attack specific targets, IC databases still clung to the idea of attacking only large target sets such as national-level electric power systems, large bridges, rail yards and industries (Note US targeting against Yugoslavia or Iraq), versus controlling the enemy's country and the battlefield by less damaging and precise attacks against these and other vital systems. Like Doctor Frankenstein in building his monster, *large parts were better, easier to accumulate and maintain*. The overall quality of the data contained within such databases is questionable.

In my early years at DIA I had heard stories of a former analyst, now promoted to a position of greater responsibility in the US government, who had drawn her name across a map of the Union of Socialist Soviet Republics in a "connect the dots-type fashion," entering geographic points for facilities that did not exist to complete her name. Another analyst I knew, when confronted about his earlier estimation of supplies possibly stockpiled by North Korea, looked up and grasped at the ceiling with empty hands – he had simply made the numbers up out of thin air. Those same numbers had been used by US forces in Korea to forward locate and stockpile the ammunition they believed necessary to potentially confront any invading North Korean army. One analyst refused to update the databases with additional targets because "it would upset the commanders to know what they were really facing." Ya think? Another had risen to his position by traveling the agency all day discussing sports scores, "What about them Redskins in the nuclear playoffs?" One has only to look at the destruction of Iraq or the former Yugoslavia's Yugo production plant to see that the IC's ability to think creatively about targeting has not advanced much past WWII. The analyst's inability to add the facility's location into these databases due to the agency's SOP was simply one more symptom of the bureaucratic ineptitude that maintained them.



Power line tower south of the Chosin Reservoir - November 1950

Despite efforts in the mid-1980s to create a unified database of all known facilities, 15 years later each activity responsible for targeting continued to maintain a separate set of facilities unique to that agency and known only to them. As there was no quality control work conducted by supervisors or managers, the value of the data contained therein was inherently questionable. Due to geographical errors alone, facilities listed within the database could be located miles from where it plotted to map and charts, by hand or electronically. Unlike the military where visits by the Inspector General (IG) would ensure that standards were being upheld, a person could spend a career at DIA and never know who served as IG. Some analysts responsible for the locating of such facilities could not plot or extract geographic coordinates. Others did not know the distance in feet of a nautical mile, or how to measure those distances on a map or chart. And civilians wonder during wars why baby milk factories and Chinese embassies are bombed.^{8,9} Again, analysts were not promoted due to the accuracy of their database work. It was usually only due to the start of a war, or increased international intentions, that the IC's databases were ever updated. As there was no record of previous identification of this specific underground facility, characterizing the facility located just outside Koto-ri was going to take tremendous effort.

There are really only two methods useful in locating an unknown facility or installation, the first is to have a piece of information that suggests that such a facility or function exists at some location, then using imagery to confirm its existence; or to use imagery to locate a suspicious facility, and then gathering all available information to determine

⁸ Was It a Baby Milk Factory? Washington Post.1998. <http://www.washingtonpost.com/wp-srv/inatl/longterm/fogofwar/vignettes/v4.htm>

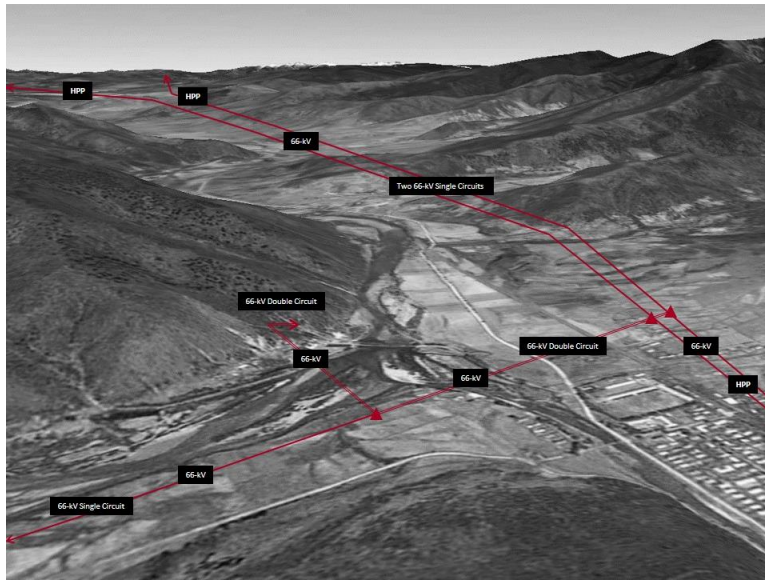
⁹ Lee, Peter. *The Bombing of the Chinese Embassy in Belgrade in 1999, Reconsidered*. Counterpunch. MAY 25, 2015. <http://www.counterpunch.org/2015/05/25/the-bombing-of-the-chinese-embassy-in-belgrade-in-1999-reconsidered/>

its function. In our efforts we used both methods. Searching imagery was known as “broad area search.” Usually, the person conducting the search had some method to their madness in scanning the area of the image. Some analysts searched along railroad tracks, some along highways and roads. In our effort, as we were searching for an unknown underground facility supported by redundant electrical power, I searched along electrical power networks.

While most electric power-generating nuclear reactors are tied to a nation’s national electrical power grid, as research into the Manhattan Project was to prove, few nuclear research and materials production facilities are tied directly to that same network. Our search effort was therefore confined to “distribution-level” electrical systems, or 66-kV.

As a bit of background, transmission networks serve as the superhighways of electrical power, moving large amounts of power from the plant where it is produced, through transmission lines to the area of a country where it is needed. As most of the Japanese-installed Korean electrical power system relied on power produced by hydroelectric power plants located deep in the mountains of the northern Korean Peninsula, few of North Korea’s hydroelectric power plants were located in the areas where the power produced was actually needed, thus the need for large transmission lines. In North Korea, historically, the national grid operated at 110- or 154-kilovolts (kV), later upgraded to 220-kV. Once the power produced at a plant has been transmitted outward, it is then received at a transmission substation, where that power is “stepped down” through a transformer to some lower voltage for distribution, usually at 66-kV. That power is then distributed through additional power lines and substations to cities, factories, and districts, where it is once again stepped down in voltage and then “conditioned” for use in homes, businesses, buildings, etc. The voltage of most power lines can be determined in a number of different ways.

Viewed remotely on imagery collected by air- or spacecraft, the voltage of an observed set of power lines can be determined by measuring the distance between the lines; the height of the power lines above the ground; the length



and number of insulators, and sometimes, as electrical power can arc to the ground, the distance between the line and outlying objects such as buildings and barns. The type of tower used to support the power line can also be used to determine the level of power carried by the lines to some degree.¹⁰

As electrical power companies seek “economies of scale,” where one unit of investment in, seeks one unit of investment out, the type of structure that holds the lines is usually standardized across the network to some system of poles or towers, whose structures are reproduced across the entire transmission and distribution network. The Japanese, and later the North Koreans, as do most countries, relied upon some form of “H-frame” to hold their distribution-level

power lines. In Korea at the time of the Japanese Occupation, “H” frames were regularly used to carry 66-kV power lines. Note the image above of the power poles taken south of the Chosin Reservoir during the retrograde movement of US Marines from Yudam-ni to the coast during the Korean War.

According to interviews conducted with survivors of the Battles of the Chosin Reservoir that were in and around the town of Koto-ri in late 1950, most of the insulators hanging from the “H” frames that stretched north across the area of Koto-ri, were shot off by Marines and others in sharpshooting contests amongst the troops and their officers as they retreated from the area that December 1950. According to those subsequently interviewed, many servicemen with no knowledge of the underground facility, wanted to destroy anything of value as they retreated leaving nothing for the invading Chinese. Despite their finesse at target practice, the “H” frames remained.

Through measurements taken from imagery and observation of the “H” frames the power entering the underground facility located at Koto-ri was estimated to be 66-kV. Further research was to reveal that the facility was supported by at least one, vaulted 66-kV transformer and by two separate single-circuit power lines supported by three separate power stations – the all-important redundant electrical power. Over the course of the next few years, the location

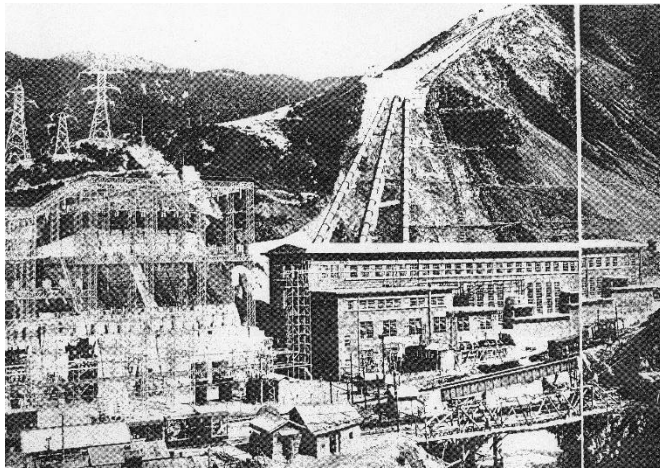
¹⁰ Shoemaker, Thomas M. *The Lineman’s and Cableman’s Field Manual* P.E., B.S.E.E. Second Edition. McGraw-Hill. New York, 2009.

would be the source of many arguments within the IC as it was known that the underground facility required large amounts of power, but seemed to produce nothing – its signatures resembling a nuclear reactor.¹¹ That the possibility that the facility had been involved in the Japanese atomic energy and research program as located on the Korean Peninsula during WWII was equally disturbing.

Electrical power usually supports specific requirements. Specific industrial functions, industrial concerns, even major industrial plants can only consume a certain amount of energy. No more energy can be placed on a transmission or distribution line than can be taken out or consumed. A steel mill might be connected directly through a substation tied to the national-level electrical power transmission grid, but that power is always, as described earlier, stepped down in voltage at the substation for distribution and further use within that facility. Whatever was located inside in the facility at Koto-ri appeared to require a large amount of electrical power.

The electric power entering the facility at Koto-ri was managed by a vaulted 66-kV substation located just outside the entrance to the cave or underground area. That substation was tied to the distribution grid by two single-circuit 66-kV power lines extending from three separate power stations located in the general area of the underground, one being the first power station in Changjin Hydroelectric Power Cascade, another being a hydroelectric power station near the town of Kanggye. These power stations were originally developed to support the industrial facilities built by Nichitsu and located at Konan, the Japanese name for Hamhung.

The consumption of such large amounts of electrical power brings with it the need to strike a balance between the amounts of energy consumed against the amount of heat produced in the consumption of that energy. As there were no smokestacks or other features extending from the underground facility to release any heat generated by the



consumption of that electric power, the facility baffled the analyst attempting to determine its function. The facility met the requirements of a reactor or a uranium enrichment plant actively operating under the North Koreans, as it could have been under the Japanese during WWII. Though the IC had sought to identify any clandestine nuclear facilities in North Korea, the identification of this facility along with other such facilities identified by our research, bought down upon the unit the animosity and wrath of that same IC. That a June 2002, National Intelligence Estimate (NIE) assessed North Korea's nuclear program as only beginning in the 1980s, with no attribution given to former Japanese nuclear efforts, was another nail in the coffin on our efforts to understand the foundations of

North Korea's current nuclear weapons program.¹² Success was anathema. To allow our research effort to continue, would overturn decades of official denial and bureaucratic incompetence.

According to Paul Kerr in an article published on Arms Control Association and titled *N. Korea's Uranium Enrichment Efforts Shrouded in Mystery* "John Bolton, undersecretary of state for arms control and international security, stated in an April 15 interview with Arms Control Today that the program 'goes back to about 1998...[but] it may go back earlier than that.'"¹³ Colin Powell, the US Secretary of State at the time "described a similar, although less precise, timeline in a series of television interviews on December 29, 2002. On NBC's Meet the Press, he said the program began 'four or five years ago, if not earlier.'"¹⁴ Contrary to his later comment that North Korea began the program around the time the Agreed Framework was signed, he said on ABC's This Week that North Korea started the program "in 1998 and 1999."¹⁵ Reality was that the program had started decades earlier, and began with the Japanese.

Neither John Bolton nor Colin Power had lied; the bureaucracy had simply failed to do its job in properly informing the nation's top elected or appointed officials. Just as Truman when he faced an out-of-control Douglas MacArthur in

¹¹ Smyth, Henry D. *Atomic Energy for Military Purposes. The Official Report on the Development of the atomic Bomb under the Auspices of the United States Government, 1940-1945.* Princeton University Press. Princeton, New Jersey. 1945
¹² Sigal, Leon V. *U.S. Failures in North Korea.* The National Interest. 22 February 2012. <http://nationalinterest.org/commentary/us-failures-north-korea-6554>
¹³ Kerr, Paul. *N. Korea's Uranium-Enrichment Efforts Shrouded in Mystery.* Published on Arms Control Association. 1 May 2003. <http://www.armscontrol.org> at <http://www.armscontrol.org/print/1286>
¹⁴ *Ibid.*
¹⁵ *Ibid.*

early 1951 and neither Omar Bradley nor George Marshal had the courage to advise him to relieve the ranting MacArthur, the bureaucracy lacked the internal leadership, integrity and courage it took to protect the country.¹⁶ The IC had lacked that same courage in the early 1990s as North Korea armed itself with atomic bombs; forgoing the jump straight to plutonium that so worried American bureaucrats; relying instead on indigenous supplies of low-grade uranium ore to fuel its bomb effort. These bureaucrats had the power to take this issue up the chain of command to the president if need be, and didn't. Why did North Korea need so many uranium mines? Because the higher-grade uranium ore they so desperately needed did not exist in otherwise mineral-rich North Korea.¹⁷ Lower quality ore meant more mining efforts. John Bolton never placed his trust the nation's bureaucrats in the first place. Much to his credit, Bolton was fully aware of the ineptitude that ruled the nation's intelligence community.

Once a facility was reported that met our specifications, we now began researching all available information, classified or unclassified in an effort to determine the function of what we had found. There was no information from any source, classified or not, that would share any light on what we had uncovered. As it stood at that time, we were left with yet one more enigmatic facility among the hundreds that dot North Korea. Continuing with the broad area search for underground facilities supported by redundant sources of electrical power we soon uncovered several more such facilities, all eventually ignored by the IC – the same people that could put only forth two signatures for use in identifying any form of clandestine nuclear materials production facilities – vast amounts of electrical power and water for cooling.

Returning to the story written by David Snell, in the Atlanta Constitution on 3 October 1945, we found a clue as to what the facility might be.¹⁸ The parts of the story that Snell wrote which seemed pertinent to our work read, “In a cave in a mountain near Konan, men worked against time, in final assembly of *genzai bakuden*, Japan's name for the atomic bomb. It was August 10, 1945 in Japan only four days after an atomic bomb flashed in the sky over Hiroshima, and five days before Japan surrendered.”¹⁹ The article continued, reading “Shortly after midnight of that day a convoy of Japanese trucks moved from the mouth of the cave, past watchful sentries. The trucks wound through valleys, past sleeping farm villages. It was August, and frogs in the mud of terraced rice paddies sang in a still night. In the cool predawn Japanese scientists and engineers loaded *genzai bakudan* aboard a ship in Konan.”²⁰

More followed: “The observers sped across the water, back to Konan. With the advance units of the Russian Army only hours away, the final scene of this *gotterdammerung* began. The scientists and engineers smashed machines, and destroyed partially completed *genzai bakudans*. Before Russian columns reached Konan, dynamite sealed the secrets of the cave. But the Russians had come so quickly that the scientists could not escape.”²¹ The part of the story that applied to the underground facility we had found consisted of the following:

- The cave as mentioned in the Snell article was located in the “mountains near Konan,” as was the underground facility we had under observation.²²
- The bomb was assembled in a cave – an underground shelter of some type.
- A convoy was used to transport the weapon – indicating that there were roads if not highways into the area where the cave was located.
- The convoy departed the facility at near midnight, and arrived at Konan near dawn, suggested that, even had it moved slowly, the cave was located some distance from the city.
- As there were sentries, the cave was a military facility of some size. The housing of sentries would require above- or below-ground facilities such as barracks.
- “The trucks wound through valleys,” indicated that the facility housing the bomb assembly plant was probably located away from the coast of Korea, in a valley, probably connected to other valleys. The facility had been built in a “secure area.”
- Wherever the Japanese cave was, the convoy had passed villages and farms on the route between the cave and the coast.
- The route the Japanese drove from the cave had passed rice paddies.

¹⁶ McCullough, David. *Truman*. Simon & Schuster. New York. 1992.

¹⁷ *Document No. 42 Telegram, Embassy of Hungary in North Korea to the Hungarian Foreign Ministry* 17 February 1979 cited in Szalontai Balazs and Sergey Radchenko. *North Korea's Efforts to Acquire Nuclear Technology and Nuclear Weapons: Evidence from Russian and Hungarian Archives*. August 2006. https://www.wilsoncenter.org/sites/default/files/WP53_web_final1.pdf

¹⁸ Snell, David. *Japan Developed Atom Bomb; Russia Grabbed Scientists*. Constitution. Atlanta, Georgia. 3 Oct 1946.

¹⁹ *Ibid.*

²⁰ *Ibid.*

²¹ *Ibid.*

²² *Ibid.*

- Finally, there was more than one cave involved: There was one in the mountains where their weapon was assembled and took hours to reach from the coast; and at least one additional cave that could be reached quickly from the coast where their bomb had been designed and its parts machined.

Further research turned up a book by Philip Henshall, *The Nuclear Axis: Germany, Japan and The Atom Bomb Race, 1939-1945*. Henshall stated that “During the Korean War, some US Marines were retreating from the area when they came across an underground factory in a huge cave. It appeared to be a weapons assembly plant, as equipment was still in place and there were radiation warning notices on the walls.”²³ Henshall also stated that the cave was located at the end of a railway spur, north of Hamhung. Unfortunately, as neither Snell nor Henshall’s work lacked end- or footnotes, we were stumped in our efforts to locate the source of their information. However, if one accepted what Snell and Henshall had written as fact, we now had several additional clues:

- The facility was located near the end of a railway spur.
- The facility was located in the mountains north of Hamhung.
- The facility had been identified by US Marines during their retreat from the reservoir.

Using the information contained in David Snell’s article and Henshall’s work as our criteria, the facility we had located met the known requirements; it was an underground facility and could be referred to as a cave or grotto, it was located inward from the coast, was in a valley, could be secured, the route from the cave to Hamhung matched the description of the route as given to Snell by his source, Tsetusuo Wakabayashi.²⁴ As Major General Almond and his aide, Alexander Haig, had driven the route while US troops and KATUSA (Korean Augmentee to the U.S. Army) were marching north; the time of travel for his trip, and that of a possible slow-moving Japanese convoy driving an atomic bomb south were a near match.

The facility lay near the end of a rail spur that extended north out of nearby Hamhung. This rail line had been constructed by Nichitsu to bring construction supplies, concrete and electrical power components north to its construction sites in the Jangbaik Mountains. The rail line had ended near the first power station in the Changjin



US Army soldiers dragging their wounded east of the Chosin Reservoir along the railway built by Nichitsu in the 1930s – December 1950

Cascade. From there, supplies were lifted over the Funchilin Pass by an overhead gondola to Koto-ri. There, a further rail line, another spur, extended north from Koto-ri past the reservoir, to the construction sites of additional dams along the Changjin River. Many soldiers during the coming Battles of the Chosin Reservoir would find cover from enemy fire along that same rail line as the Chinese closed in east of the Chosin Reservoir in late November 1950. Many survivors of the massacre on the east side of the reservoir would find their way to Marine Corps lines by walking along those same tracks. Determining whether or not the facility had been located by the US Marines during their retrograde movement from the Chosin Reservoir to Hamhung during the Korean War was however far more difficult.

As we were to determine over the course of our investigation, the previous team assigned to the fusion cell had contacted members of the X Corps, G-2, Intelligence, who were in Hamhung during the Korean War, but none of them had any information about the existence of this specific underground facility. Inquiries to former members of the G-2 of the Supreme Allied Commander Pacific (SCAP), MacArthur in Tokyo, also revealed no knowledge of the facility.

According to those contacted, there were many underground facilities in North Korea at the time US forces had advanced north in November of 1950. It was difficult to remember one specific location. Most headquarters intelligence personnel were never forward located to the area of the battlefield. Efforts to track the facility through the US Marine Corps also proved to be difficult as most of the commanders and higher echelon personnel that might have been aware of an unusual location, had long since passed away. Contacts with lower ranking Marines that passed

²³ Henshall, Philip. *The Nuclear Axis: Germany, Japan and the Atom Bomb Race, 1939-1945*. Stroud, Sutton. 2000.

²⁴ Snell, David. *Japan Developed Atom Bomb; Russia Grabbed Scientists*. Constitution. Atlanta, Georgia. 3 Oct 1946.

through the area of Koto-ri revealed that in the day-to-day struggle to survive, few recalled anything past the range of their rifles. Not an unusual revelation for men who had been in combat.

After the Gulf War the US Army would come under intense criticism for failing to secure the explosives, weapons and ammunition they had found stored at schools and hospitals in their drive north from Kuwait to Baghdad. Many of these explosives were later thought to turn up as improvised-explosive-devices in the aftermath of the war and the US effort to rebuild Iraq. The US and its allies in the region would suffer thousands of casualties from those explosives in the subsequent period of insurgency in Iraq.²⁵ It is a simple fact of war that commanders and soldiers deal with the enemy they face at the end of their barrel, and not the enemy they may face in the future. The research group continued to move forward in the effort to determine the function of the facility near Koto-ri. As we dug deeper, it became clearer that, while the US Marines may have located or identified the facility, it was the US Army, perhaps personnel from the former Manhattan Project that finally investigated the cave.

The first clue that some kind of investigation had occurred was contained in Eric Hammel's work; *Chosin: Heroic Ordeal of the Korean War*. In describing the ordeal of US forces involved in the Battles of the Chosin Reservoir, Hammel had revealed a name: Technical Sergeant Carl Hanson, US Marine Corps, Second Battalion, who was described as the "battalion's 1st atomic warfare specialist," as being at Koto-ri, just south of the identified underground facility.²⁶ As Hammel related the story, Hanson was present at Koto-ri the morning on 29 November 1950 and volunteered to accompany Task Force Drysdale in its attempt to relieve UN forces trapped at Hagaru-ri just south of the Chosin Reservoir.²⁷ How, and why Hanson was at Koto-ri was something of a mystery. Before continuing, one must understand some of the history of the Korean War.

The Korean War began on 25 June 1950 when North Korean forces invaded South Korea all along their common-border. The Korean Peninsula had been ruled as a Japanese colony from 1910 to 1945 and divided along the 38th Parallel, into southern and northern zones of occupation for the purposes of accepting the surrender of Japanese forces



Hagaru-ri. November, 1950

by the Soviet Red Army north, and the US Army south of that line. Agriculture ruled the economy of southern Korea, while the northern part of the Korean Peninsula held the majority of the Japanese installed heavy industry and electrical power facilities established during the Japanese Occupation of Korea and the facilities suspected of supporting the wartime Japanese atomic energy and weapons research program.

By December 1945, the two parts of the peninsula were administered by a U.S.-Soviet Union Joint Commission, as agreed at the Moscow Conference (1945), with the aim of granting Korea independence after a five-year period of trusteeship. Due to the inability of the Joint Commission to make progress in creating one government to rule over a unified Korea, the U.S. decided to hold elections in the southern part of the

peninsula under the auspices of the United Nations (UN), with the aim of creating an independent Korea. Communists in the northern area of occupation quickly purged the country of its rightwing politicians, Christians, land owners and capitalists. Many North Koreans fled south into the US zone of occupation. The Soviet authorities and the Korean Communists refused to co-operate with the US-sponsored elections on the grounds that these elections would be unfair; many South Korean politicians also boycotted the election. A general election was held in the South on 10 May 1948. North Korea held parliamentary elections three months later on 25 August 1948.

The resultant South Korean government proclaimed a national political constitution on 17 July 1948, and elected Syngman Rhee as the first President of the Republic of Korea (ROK) on 20 July 1948. The ROK (South Korea) was established on 15 August 1948. In the Russian Korean Zone, the Soviet Union established a Communist North Korean government, the Democratic People's Republic of Korea (DPRK) led by Kim Il-sung. President Rhee's régime

²⁵ Zoroya, Gregg. *How the IED changed the U.S. military*. USA Today. 19 December 2013.

<http://www.usatoday.com/story/news/nation/2013/12/18/ied-10-years-blast-wounds-amputations/3803017/>

²⁶ Hammel, Eric. *Chosin: Heroic Ordeal of the Korean War*. Presidio. Novato, CA 1981

²⁷ *Ibid.*

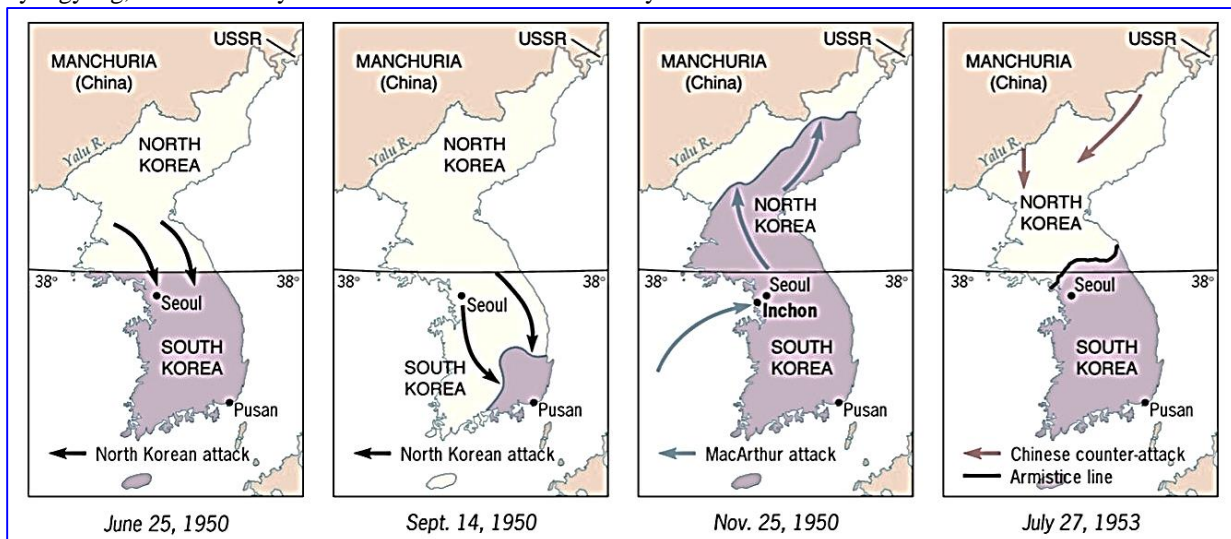
excluded communists and leftists from southern politics. Disenfranchised, these communists now prepared for a guerrilla war against the US-sponsored ROK Government.

Shortly after the Korean War began North Korean forces quickly overran the capital of Seoul and moved southward to occupy the country in its entirety. South Korean forces were routed. On 27 June 1950 US President Truman ordered US air and naval forces to aid South Korea. When General of the Army Douglas MacArthur visited the country on 29 June 1950 and he envisioned the subsequent amphibious landing at Inchon, the ROK Army (ROKA) was in full retreat; US Army units were rapidly deployed from Japan to the peninsula.

These largely unprepared US soldiers were formed into Task Force Smith and met the advancing North Korean tanks and army at the South Korean town of Osan. Perhaps one in six men had previous combat experience; most of the men were young, twenty years old or less who had spent their time in service enjoying the peacetime pleasures to be had in post-war Japan.

On 5 July Task Force Smith was overrun and dispersed by the 107th Tank Regiment of the 105th Armored Division, which was supporting the North Korean 4th Division in their advance southward. Despite its defeat, Task Force Smith brought time for US forces to prepare defensive lines along what would later become known as the Pusan Perimeter where they, and ROKA forces secured one small area of the peninsula from which to subsequently attack northward. Using Marines withdrawn from the Pusan Perimeter, MacArthur created the Tenth Corps under Lieutenant General Ned Almond operating separately from Lieutenant General Walton Walker's Eighth Army thereby permanently dividing his forces. US Marines and Army force under Tenth Corps landed at Inchon on 15 September, forming the anvil upon which Eighth Army and ROK forces advancing northward from Pusan, where to smash the North Korea Army.

In the aftermath of the landing at Inchon, and breakout from Pusan, the North Korean Army disappeared into the mountainous spine of Korea or otherwise fled north. And there, in the aftermath of MacArthur's great wartime victory at Inchon, had the US not sought to unify the Korean Peninsula under the government of the Rhee Syngman, the story would have ended. On the 30th of September 1950, ROKA units crossed the former border separating North Korea from South Korea toward Pyongyang on the western side of Korea, and towards Wonsan in the East on 1 October 1950. US Army units under the Eighth Army crossed the border north of Seoul seven days later, moving toward Pyongyang, and ultimately to the Yalu River in a bid to unify Korea.



Seeking to once again cut off fleeing North Korean forces as they had at Inchon, the Tenth Corps boarded ships at Inchon along Korea's western coast and headed to Wonsan on the eastern coast. Naval mines laid by North Korea off Wonsan prevented the Marines from landing there, and left them moving north and south along the coast for over two weeks, in what would later be called "Operation Yo-Yo." While the Marines were tossed about off the coast, Wonsan was taken by ROKA units on 10 October. Nine days later the North Korean capital of Pyongyang fell to a combined ROKA and US Army force. US Marines finally landed on 25 October to be welcomed ashore by Bob Hope who landed there to entertain troops the next day. Forces of the ROKA continued their advance northward from Wonsan to Hamhung. The US 7th Division, Major General David Barr commanding, began landing at Iwon, north of Hamhung on 29 October, with the entire division offloaded by 8 November. Some of its units turned north toward the Tumen River, others south toward Hamhung.

On 15 October 1950, Hamhung fell to the ROKA. Once occupied by ROK and US forces, newspapers of the time began to issue strange reports of atomic materials research and production facilities located around the area such as the one that follows:

Identify Ore Plant in Korea

“Washington, D.C. (UP) An informed source said Wednesday that the vast and strange looking plant found by US forces at Hungnam in North Korea probably was a Soviet uranium ore processing plant. This source added, however, that the plant does not produce atomic explosives. Apparently the Hungnam facility, situated in an area of North Korea where there are many chemical plants, was a part of the long chain of industrial processes through which uranium ore must go before it reaches the refined metallic form used in atomic production reactors. Conversion of this metal into explosives for the Soviet atomic bomb project presumably is accomplished at plants inside the USSR. The US atomic energy commission knew about the Hungnam plant, the informed source said, before it got into the news reports. He hinted that it knows of at least one other similar facility in North Korea. The AEC [Atomic Energy Committee], it was learned, is not excited about the Army's find and does not intend to send any of its officials to North Korea.”²⁸

Numerous such reports were written and picked up by the wire services of the time.²⁹ The Army subsequently denied and downplayed the importance of these reports, despite the fact that earlier, on 23 August 1950, US Naval and Air Force authorities announced that they were participating in an air “campaign to destroy North Korean industrial facilities with possible links to the Russian atomic program.”³⁰

Air Strikes May Have Hit Red Atom Plants

“TOKYO, Aug. 23 (Wednesday) (INS) US Navy Headquarters in Tokyo today announced its participation



US Marines entering the area of the Funchilin Pass, north of Hamhung, North Korea, November 1950. The Nichitsu built railway used to haul supplies north to the pass during the construction of the Chosin Reservoir and power stations appear to the left and center of the image. Changjin Hydroelectric Power Plant Number 1 lies to the upper right.. The Funchin Pass lies above the power station.

in a campaign to destroy North Korean industrial facilities with possible links to the Russian atomic program. The Navy announcement followed a powerful air blow Tuesday in which B-29 Superforts dropped 500 tons of bombs at Chongjin, North Korean deep water port 40 miles southwest of the Soviet-Siberian Border. It was believed the B-29 strike may have knocked out industrial facilities important to Russian atomic research and production. The Navy's announcement said a United States destroyer's report “indicates highly successful

bombardment of Chongjin the night of Aug. 20.” The destroyer's targets were listed as the Mitsubishi iron works, railroad spur yards, harbor installations, warehouses and one radio station. Chongjin's railway connects with the Siberian rail line to Vladivostok. An Air Force communiqué said the B-29s struck “heavy blows” against military and industrial targets in Chongjin. The planes flew to within 40 miles of the Siberian border in daylight raids from Okinawa and Japanese bases in following up Monday attacks in which the B-

²⁸ *Identify Ore Plant in Korea*. Waterloo Daily Courier. Waterloo, Iowa, Wednesday, October 25, 1950

²⁹ See also: *Captured Red Korean Tells of Uranium Sent to Russia*. Walla Walla Union-Bulletin. Evening Edition. 4 May 1951; Mylar, Joseph L. *Might Be Uranium Processing Plant*. Page Two. Section B. Santa Fe, New Mexican, 26 October 1950; *US Is Unexcited By Soviet Atom Plant in Korea*. The Modesto Bee, Thursday, 26 October 1950, etc.

³⁰ *Air Strikes May Have Hit Red Atom Plants*. Tokyo, Aug. 23 (Wednesday) (INS). Long Beach Independent. Long Beach 12, California Wednesday, Aug. 23, 1950. Vol 12. No 339

29s dropped 200 tons of bombs on Pyongyang and Seoul. The heavy strike on Chongjin supplied further evidence that American strategic bombing is destroying an important section of Communist Asia's industrial plant. There was a belief in Tokyo that this is even shattering plants used by the Russians in atomic research and production. The Konan fertilizer and explosives plants, the first target hit by Maj. Gen. Emmett (Rosie) O'Donnell's Superforts, have long been the object of intense Allied intelligence interest. Belief now exists, that these plants may have been linked with the Russian atomic program. The Konan industrial targets have been blasted three times by the B-29s. During one raid bombers flying 15,000 feet above the target were rocked by a series of explosions believed to be from underground glycerin tanks. Konan's explosive plants have been estimated as 85 per cent destroyed and the Air Force is systematically wiping out other gigantic plants built by the Japanese and believed utilized by the Russians.”³¹

If there was a conflict between what was released to the press about the presence of nuclear materials production plants located in Hamhung, the US Army, Navy and Air Force, then there was probably a conflict between the US Atomic Energy Committee (AEC) and other US agencies in their lack of excitement about those same such facilities as located in North Korea. Was it an AEC that was “not excited about the Army's find and does not intend to send any of its officials to North Korea,” that was responsible for the presence of one Technical Sergeant Carl Hanson, US Marine Corps, Second Battalion's first atomic warfare specialist, who just happened to be at Koto-ri, just south of the identified underground facility on 29 November 1950?^{32,33} We now dug deeper into the Battles of the Chosin Reservoir and what took place in the area of the reservoir, and Hamhung between mid-November and the end of December, 1950.

Near the end of October, US Marines under the command of Colonel Homer Litzenberg relieved ROKA forces in the area of Hamhung, Tenth Corps moved its headquarters to the city on 23 November 1950. ³⁴ US Marines now advanced toward their objective; the Chosin Reservoir. Shock troops, used to on-demand naval artillery support; the Marines argued that by moving so far inland, they were out of their element.



US Marines entering Koto-ri, north of Hamhung, North Korea, 10 November 1950. The area of the identified underground facility lay to the back of those in this picture

On 2 November the Marines settled into nighttime defensive positions in the hills along the roadway just south of Sudong, at the base of the Funchilin Pass leading to the Chosin Plateau – and the underground facility. At least once during the Tenth Corps advance to the Chosin Reservoir, on the 27 November, General Almond had ridden along that same road from Hamhung and Hagaru-ri; the trip had taken nearly the entire day. Almond ordered Army Engineers to grade and widen the road. ^{35,36}

As the Marines moved up to relieve South Korean forces in the area, ROK soldiers told them that to the north there “many, many Chinese.”³⁷ Unbeknownst to the Marines, three regiments of the Chinese Communist Army's 124th Division; the 370th, 371st and 372nd supported by five Russian-made T-34 tanks of the NKPA 334th Tank Regiment blocked the route to the reservoir.³⁸ At 11 o'clock that night the preliminary probing to what would follow a major Chinese attack began. The Chinese tactics were

³¹ *Air Strikes May Have Hit Red Atom Plants*. Long Beach Independent. Volume 12. Number 339. Long Beach 12, California. Wednesday, 23 August 1950

³² *Identify Ore Plant in Korea*. Waterloo Daily Courier. Waterloo, Iowa, Wednesday, October 25, 1950

³³ Hammel, Eric. *Chosin: Heroic Ordeal of the Korean War*. Presidio. Novato, CA 1981

³⁴ Mossman, Billy C. *Ebb and Flow*. November 1950-July 1951. Center of Military History. United States Army. Washington D.C. 1990

³⁵ Toland, John. *In Mortal Combat: Korea, 1950-1953*. William Morrow and Company, Inc. New York. 1991.

³⁶ Appleman, Roy R. *East of Chosin: Entrapment and Breakout in Korea, 1950*. Texas A&M University Press. College Station. Third Printing. 1991.

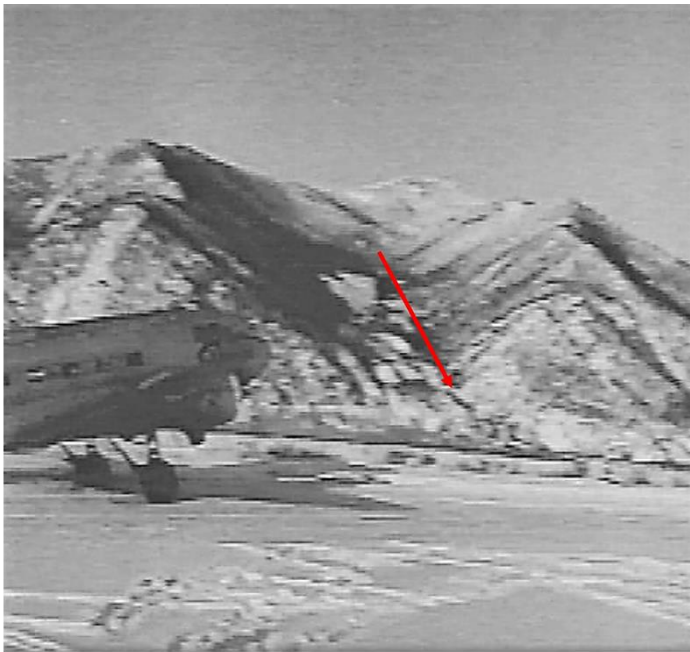
³⁷ *With the Marines: Chosin to Hungnam*. U.S. Department of Defense documentary film. 1951.

³⁸ *Ibid.*

simple: “Attack at all points, maintain pressure everywhere, but always search for a gap. When a gap was found, flow through it and attempt to segment the defense.”³⁹ The fighting soon evolved into a brawl. By the morning of the 4 November the Chinese 124th Division simply ceased to exist. Through the end of the Korean War the Chinese 124th Division would never be rebuilt or reassembled to fight another day in Korea.

On the western side of Korea, near the town of Unsan, Chinese forces badly mauled the US 8th Cavalry Regiment, destroyed the ROKA 6th Infantry Division and one regiment of the ROKA 9th Infantry Division. Most military analysts of the time assumed that the subsequent Chinese withdrawal north from Unsan on the west, and Sudong in the east in early November 1950, meant that China would not intervene in the Korean War on a large scale. That line-of-reasoning would soon revealed itself as a serious error when the Chinese reengaged American and ROKA forces later in that month. Despite those losses however, the path to the Chosin Reservoir, and apparently north to the Yalu River was now wide open, and the Marines were now on the advance. As subsequent events were to reveal, it is unlikely at that time, that Technical Sergeant Carl Hanson, was with them.⁴⁰

Over the next several days US Marines breached the Funchilin Pass and on 10 November entered the North Korean village of Koto-ri. In the valley on their way to the pass and in their advance toward Koto-ri, the Marines noticed electrical power components and equipment stored in the finger valleys along the road north.



One of the rare photos in public, taken during the Korean War by US forces in the area of Koto-ri, that shows the area of the cave or underground facility where Japan may have assembled its version of an atomic bomb during the last days of WWII. Note the houses or other buildings at the base of the mountain below the arrow.

Many of the Marines assumed that this was simply electrical power equipment dismantled from the three power stations located on the western face of the Jangbaik Mountains.⁴¹ There was however, no evidence that the power stations had been dismantled. Many Marines remembered the well-lit power stations as they later retreated south from the Chosin Reservoir one month later in December 1950, the plants had never been dismantled.⁴² Soviet military equipment and uniforms were also uncovered in the valley, but this might not have been considered unusual at the time as the North Korean Army was supplied by the Soviet Union and fought with Soviet weapons. Exactly what the equipment found might have been has never been fully explained. It should also be noted that many wartime newspapermen and military officials at the time, believed that China had entered the war to protect these power stations that were thought to be supplying power to Manchuria; none were. As the Marines moved northward to Hagaru-ri at the south end of the Chosin Reservoir, UN forces to their east moved north through Chongjin toward the North Korean-Soviet border, and on the west of Korea the battle cry was “on to the Yalu!”⁴³

At Hagaru-ri the Marines bored northward on the east side of the Chosin Reservoir to a point where patrols actually reached the dam built across the Changjin River by Nichitsu in the 1930s that created the Chosin Reservoir. But as Ray Vallowe explained in his recently published book, *What History Failed to Record, A Phantom Force – Lost to History*, the Marines were not obeying the orders given to them by General Ned Almond, and were actually impeding the advance north.⁴⁴ A US Army Regimental Combat Team (RCT), what became known as the 31st RCT, was now assembled and sent north by the X-Corps commander General Ned Almond to relieve the Marines on the east side of

³⁹ *Ibid.*

⁴⁰ Hammel, Eric. *Chosin: Heroic Ordeal of the Korean War*. Presidio. Novato, CA 1981

⁴¹ Carmin, Charlie. “MEMOIRS OF A CHOSIN VETERAN.” Ellinwood, KS- Korean War Veteran of the United States Marine Corps. The Korean War Educator. <http://koreanwar-educator.org/memoirs/carmin/index.htm>

⁴² Hammel, Eric. *Chosin: Heroic Ordeal of the Korean War*. Presidio. Novato, CA 1981

⁴³ Hoyt, Edwin P. *On to the Yalu*. Stein and Day, New York. 1984

⁴⁴ Vallowe, Ray. *What History Failed to Record, A Phantom Force – Lost to History*. 2015, available at: http://koreanwar-educator.org/topics/chosin/vallowe_research/vallowe_ray_book.pdf

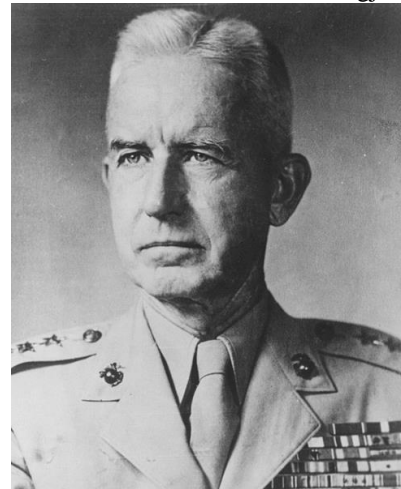
the Chosin Reservoir, and bypass them in the move north.⁴⁵ The Marines were now ordered to reassemble at Hagaru-ri and attack west, through the village of Yudam-ni on the west side of the Chosin Reservoir toward the North Korean town of Kanggye. Their mission; to protect the eastern flank of the US Eighth Army as it advanced north toward the Yalu River. As the research effort was eventually to prove, members of the 31st RCT were instrumental in determining that the cave existed in 1950, and deserve some description.

Regimental Combat Team 31, also known as Task Force MacLean and later Task Force Faith, was created as part of the final United Nations Command (UNC) offensive to occupy North Korea and cut the main Chinese supply route into the neighboring Eighth United States Army zone. The 31st RCT was made up of the 3/31st and 1/32nd infantry battalions, two batteries of the 57th Field Artillery Battalion, and one platoon; Battery D, 15th Antiaircraft Battalion. As a full RCT it was short one infantry battalion and a tank company, which were expected to soon arrive at the east side of the Chosin Reservoir. The 31st RCT numbered about 3,000 soldiers, 600 of whom about were KATUSA – young Korean men dragooned off the streets of South Korea by the government of Rhee Syngman, into the US Army.

The 31st RCT was commanded by Colonel Allan D. “Mac” MacLean. It began arriving in the area on 25 November in numerous groups, with its centermost units arriving on the 26th. Once in place it occupied two separate positions along a 10-mile (16 km) stretch on the east side of the Chosin Reservoir, relieving the Marines facing north. Basic defensive positions were established the night of the 26th however, not expecting to encounter the enemy, the unit did not establish a tightly secured perimeter. Colonel MacLean initially planned to break camp early the following morning and attack north across the dam creating the reservoir and proceed further north, to the town of Changjin. However that plan would never be put into action.

During the morning of the 27th powerful Chinese forces, filtering into the area undetected, launched a surprise attack against elements of the RCT spread along the east coast of the reservoir, as well as Marines now occupying Yudam-ni in the mountains west of the lake. While the assault inflicted heavy casualties and forced the postponement of the planned attack, the advance north from the east side of the reservoir, and westward from Yudam-ni was not cancelled in light of a new factor, the Chinese.

On the afternoon of the 28th General Almond and his aide, 1stLt. Alexander Haig (later Secretary of State under President Reagan), flew by helicopter, into the perimeter of the 31st RCT. Despite evidence of a massive Chinese intervention, Almond exhorted the soldiers to begin the offensive stating: “The enemy who is delaying you for the moment is nothing more than remnants of Chinese divisions fleeing north” he told the soldiers, “We’re still attacking and we’re going all the way to the Yalu. Don’t let a bunch of Chinese laundry-men stop you.”⁴⁶ Almond, trailed by the younger Haig then flew back to Hagaru-ri to meet with General O.P. Smith, the commander of the 1st Marine Division; comprised of the 1st, 5th and 7th Marine Regiment, convinced that the 31st RCT



Lieutenant General O.P. Smith

was strong enough to begin its attack and deal with whatever “remnants” of CCF forces blocked their way north.⁴⁷ Although large numbers of Chinese troops were seen moving south throughout the day, as temperatures dropped to far below freezing, that did not change the view of the situation of US officers overlooking the now freezing Chosin Reservoir. MacLean still expected reinforcements: his second infantry battalion (2-31) and the 31st Tank Company. Those reinforcements would never arrive.

The People’s Liberation Army (PLA) 80th Division, reinforced by the 242nd Regiment from the 81st Division; elements of the elite PLA 27th Corps, had surrounded the task force, cutting off all relief. To the south, the PLA had established a strong roadblock only a few miles north of the Marine perimeter at Hagaru-ri. When the expected tank company reached the south end of the reservoir and moved north past Hagaru-ri, to Hudong, it was immobilized by the roadblock, losing four tanks. As the next day arrived, the tank company once again tried to move north, this time with scratch infantry support from headquarters and service troops of the 31st Infantry and 57th Field Artillery, but was once again forced back.

During the night of 28 November, the Chinese again attacked, overrunning several positions and inflicting additional casualties. Prisoners taken during the fight indicated that the Chinese facing them were from the 80th

⁴⁵ *Ibid.*

⁴⁶ *Staff Operations: The X Corps in Korea, December 1950*

⁴⁷ Stewart, Richard. *The Korean War: The Chinese Intervention*, 3 November 1950-24 January 1951. The Department of Defense, Army, Center of Military History. 1995

division and possibly the 241st Regiment of the 81st Division. The 1/32 now began to withdraw southward along the shore to solidify their position.

Though the unit was withdrawing, MacLean, seeing what he believed to be his long awaited reinforcements moving north, approached the soldiers. They were Chinese. MacLean was shot several times and taken prisoner; dying in a cave some four days later. As Lieutenant Colonel Don Faith, commander of 1/32 took command, the units on the east side of the Chosin Reservoir now became Task Force Faith. The 7th Marine Regiment being relieved on the east side of the Chosin Reservoir and had rejoined with the 5th Marine Regiment now at Hagaru-ri, just south of the Chosin Reservoir. The 1st Marine Regiment remained further south, at Koto-ri. The 7th Marine Regiment now advanced to Yudam-ni on the northwest side of the reservoir where, Chinese forces attacking from the north and west, forced the withdrawal of all Marine units into a defensive perimeter surrounding Hagaru-ri. Like the US Army unit now cutoff and being destroyed on the east side of the Chosin Reservoir, the Chinese hoped to similarly isolate and destroy the 5th and 7th Marine Regiments at Hagaru-ri. Help for Hagaru-ri, when help did arrive, was led by Lt. Col. Douglas B. Drysdale, commander of 41st Independent Commando, Royal Marines. No help ever arrived for men of the 31st RCT.

By the evening of 28 November, Koto-ri was over-manned with soldiers, sailors and Marines who had been ordered north toward the Chosin Reservoir. The units available consisted principally of the 41st Commando, Royal Marines; Company G, 1st Marines; and Company B, 31st Infantry. Colonel Lewis "Chesty" Puller formed a motorized task force, a relief convoy, from the various units present, and placed Lt. Col. Douglas B. Drysdale, commander of the 41st Commando, in charge of the attack north. According to Army Captain Charles Peckham of Baker/31, 1st Marine Regiment commander Colonel Puller, "personally ordered Drysdale to break through the Chinese roadblocks and lead the convoy all the way to Hagaru-ri."⁴⁸ Technical Sergeant Carl Hanson, would be with them – but only for part of the journey.⁴⁹

On the morning of 29 November, Task Force Drysdale, following previously coordinated UN artillery and airstrikes north, attacked two Chinese-held areas along the road out of Kotori, opening the way for the main convoy. Task Force Drysdale moved north at 0930 hours on 29 November, British marines in the lead, followed by Company G, Company B, and the headquarters section of General O.P. Smith's command that was needed at Hagaru-ri. Chinese soldiers, dug in east of the road about a mile and a half north of Koto-ri, offering stiff resistance; were overcome by the attacking force and eliminated. Task Force Drysdale however, stalled about one mile further north near noon in what would become known as Hellfire Valley.

Heavy fire from the ridges to the east halted the relief column. Mortar fire started a truck burning near the column's center. Units and groups that comprised the convoy rapidly became separated and strung out along the road north from Koto-ri. Concentrated and accurate Chinese small arms and mortar fire prevented the column from being moved, which then obstructed the road and split Drysdale's column. Ahead of the truck, Drysdale with most of his commandos, two platoons of tanks, Company G, and a few members of Company B managed to move on. Drysdale expected the remainder of the column to close ranks. But behind the burning vehicle, about sixty commandos, most of Company B, and the division headquarters troops and probably Technical Sergeant Carl Hanson, were unable to move.⁵⁰

Of the approximately 1,100 soldiers, Marines, Royal Marines and even some South Koreans who had started out from Koto-ri on the morning of 29 November, only about 250 subsequently arrived at Hagaru-ri. Survivors of Task Force Drysdale lay scattered along the miles of the road in between; most within six major groups. These small pockets of men had been cut off and isolated by heavy Chinese fire between the masses of wrecked and burning vehicles blocking their route north. Here the Marines had suffered their own massacre, one about which few would ever write. Technical Sergeant Carl Hanson would return from the disastrous attempt to relieve Hagaru-ri to Koto-ri later that afternoon where, he "walked straight to his tent and sacked out."⁵¹

To the analytic mind, it seems possible that Hanson never had any intention of going all the way to Hagaru-ri. Hanson instead ventured just outside the perimeter at Koto-ri to inspect the immediate area and report back to commanders at Koto-ri, Hamhung, Tokyo, or to the now approaching investigating team located south of the perimeter surrounding Koto-ri, just what lay inside the underground facility. It is known that the group of officers now approaching were in radio contact with Army forces encircled at Koto-ri.⁵² That Hanson had his own tent within the confines of what might have become a disaster is telling; Koto-ri was now surrounded. Hanson, a combat veteran of WWII who had fought on Saipan and Guadalcanal did not take a place on the perimeter.⁵³ That his tent was not

⁴⁸ Hammel, Eric. *Korean War: Death of Task Force Drysdale*. MILITARY HISTORY. 6/12/2006.

[HTTP://WWW.HISTORYNET.COM/KOREAN-WAR-DEATH-OF-TASK-FORCE-DRYSDALE.HTM](http://www.historynet.com/korean-war-death-of-task-force-drysdale.htm)

⁴⁹ Hammel, Eric. *Chosin: Heroic Ordeal of the Korean War*. Presidio. Novato, CA 1981

⁵⁰ *Ibid.*

⁵¹ *Ibid.*

⁵² *Ibid.*

⁵³ *Ibid.*

“liberated” by others after his departure suggests that it was common knowledge to those around him that, unlike the 31st RCT on the east side of the Chosin Reservoir and Task Force Dysdale, Hanson was returning intact later that day. Apparently, unlike other Marines along the perimeter surrounding Koto-ri, Technical Sergeant Carl Hanson, had other things to do.⁵⁴

As the Chinese attacks intensified against units of the 31st RCT, Lieutenant Colonel Don Carlos Faith now consolidated his remaining forces into a single defensive perimeter. With the assistance of Marine air support, the 31st RCT repelled numerous assaults by the units of the PLA 80th and 81st divisions for two more days, inflicting severe losses on the communist forces who left hundreds of dead in the snow around the new perimeter. Running low on ammunition, realizing he was surrounded, with over half his force killed or wounded, including a high proportion of key leaders, Faith decided to attempt a breakout south, toward Marine lines. The situation was so desperate that only a minimum of equipment and sufficient vehicles to carry the wounded were taken, freeing additional soldiers to fight as infantry. All remaining equipment was destroyed in place, including the artillery's howitzers after they fired their last rounds.

Confusion over dates surrounding events at the Battles of the Chosin Reservoir continue to this day. Aided by Marine F4U Corsairs and Navy F7F twin-engine fighters which strafed and bombed Chinese positions, the breakout of Task Force Faith toward Marine lines at Hagaru-ri began on 1 December 1950. Encumbered with hundreds of wounded and under continuous attack, the truck column made its way down a gravel road on the east side of Chosin Reservoir. The march south was first interrupted by attacking Marine F4U Corsairs who, mistaking the retreating force for Chinese, bombed the lead platoons of the force with napalm and strafed the column, indiscriminately killing and incinerating US and South Korean KATUSA alike. The napalm drop further demoralized the soldiers already worn from nearly a week of continuous and near hand-to-hand combat. The column stalled.

As the front of 31st RCT made their way forward, close-range small arms fire from across the valley now caused many members of the rear guard to seek shelter below the road, versus protecting the trucks carrying those previously wounded. Enemy fire killed or wounded many of those already in the trucks, as well as drivers who now viewed the job as near-suicide. In late afternoon, with daylight fading, Faith forced the column forward once again, albeit slowly, until it approached Hill 1221 overlooking the road. There a battalion of the PLA 242nd Regiment had established a strong defensive position atop the hill with a strong roadblock beneath to block Faith's retreat. Several US units attacked the hill, trying to clear it.



Leading the assault against the roadblock, Faith was hit by shrapnel from an enemy grenade and grievously wounded. Darkness now closed in deep within the mountains of North Korea, ending protective Marine air cover. The assaulting Chinese now grew bolder, penetrating closer to the convoy. The cohesion of the 31st RCT began to disintegrate. Unbeknownst to Faith and the others with him, supporting tanks sent north to make contact with and assist in their withdrawal, had only reached the village of Hudong, south of their position, and had been withdrawn. Task Force Faith was doomed.

At this point nearly all of the 31st RCT officers were dead or seriously wounded, Faith, sitting in a truck was shot again at close range; Major Harvey Storms, the last commander of 3/31 Infantry Regiment, was also killed. The 31st RCT's noncommissioned officer ranks were decimated. Small unit attacks were made on the hill, clearing part of it, but in the ensuing confusion and panic, many soldiers seeking safety, began to retreat onto the frozen reservoir behind the hill and walked on the ice toward Marine positions several miles to the south. The roadblock at the base of the hill was finally removed, and the truck column again crept forward in the dark but was permanently halted by another Chinese roadblock further south, just north of the village of Hudong. The US troops and tanks occupying Hudong earlier that day – who might have rescued that part of the task force – had been ordered to return back to Hagaru-ri

⁵⁴ Hammel, Eric. *Chosin: Heroic Ordeal of the Korean War*. Presidio. Novato, CA 1981

the previous day to bolster the defenses surrounding the town. No one seems to know to this day exactly who gave the order for the relieving tanks to withdraw. Remaining members of the 31st RCT now scattered.

The events east of the Chosin Reservoir eventually became known as a massacre. More than 1000 US Army and an unknown number of KATUSA had been killed or captured in the melee; more than one-third. Of those that survived the disaster and eventually arrived at Hagaru-ri, 1500 wounded were evacuated through an airstrip built by the Marines that became operational on 1 December 1950. Of the more than 3000 US Army and KATUSA who had moved north to the east side of the Chosin Reservoir, only 385 survivors could be counted as effectives. Similar to events east of the Chosin Reservoir where the advance of US forces in their march north were halted, events in Washington DC would eventually halt our efforts to determine the validity of our analysis and investigation, into the cave or underground facility just west of Koto-ri.

As we began uncovering more locations suspected of supporting the former Japanese program on the Korean Peninsula in 1945, and current North Korean facilities supporting Pyongyang's desire for nuclear weapons, our efforts had come to the attention of the National Intelligence Council (NIC) and the Joint Atomic Energy Intelligence Committee (JAIEC). I, as the primary author, and with the group, had authored several papers discussing what we had found. Those papers were then and remain today, controversial. Unlike similar such efforts within the IC that were based upon a Japanese-style group consensus, the papers I authored were stand-alone documents, representing my own thoughts with input from the group. That our efforts repudiated many previously identified, IC-accepted and approved facilities didn't help. The time-honored installations simply could not withstand intense scrutiny and investigation. Their acknowledged installations did not match the facts at hand that the IC had at their disposal and were based largely upon guesswork.

In the summer of 2005 I received a call from the secretary of the National Intelligence Council (NIC). We talked a bit as she explained that the NIC was aware of our work and asked if we would come and brief them. I naively jumped at the chance.

I thought it would be an honor to brief the NIC, one of the highest groups managing the IC. It would be akin to a small town lawyer arguing a case before the Supreme Court, however it was probably one of the worst experiences in my life, and the most intellectually dishonest meeting I ever attended.

As the NIC had requested we presented our short, perhaps 15 minute-long presentation. Let me be clear, we never met with the chairman of the NIC or any of his myriad assistants. There were four of us from our office in attendance; two Air Force officers, the briefer Dr. Eric Hehl, and myself. I was not a briefer and had no intention of being placed in the spotlight. I was a targeteer – a sort of monk that hovered over Bausch and Lomb optical light tables, topographic Kargyl machines and advanced analytic point positioning systems. I had spent an entire military career being the one who identified, selected targets, planned bombing raids and other missions; I was the one who was to be seen, but not allowed to wander around. Similarly, Eric was a virologist, and was formerly employed by DIA to work on North Korea's biological warfare program where, working together, we had identified many suspect North Korean biological warfare sites that had also met with IC disapproval. Despite that, our efforts along with many others had been recognized in 2003 by the Director of Central Intelligence (DCI) George Tenet with a Meritorious Unit Citation.

We began our briefing with what was publicly known about the WWII-era Japanese wartime atomic energy and weapons research program. We then discussed the methodologies we had drawn from that research, and identified some of the facilities that had probably survived the Japanese surrender in August 1945 to include three factories that produced heavy water. We revealed the existence of several previously unknown, and clandestine facilities in modern-day North Korea, which we had identified over the course of our nearly year-long effort using those same methodologies. In studying the Japanese program we had drawn some conclusions, these included:

- The Japanese atomic energy and weapons program was heavily compartmented; only a select few of Japan's military and civilian scientists were ever fully aware of the full scope of the program.
 - Communications about and within the program were tightly controlled; all communications were either committed to paper or conducted face-to-face with nothing transmitted via voice or radio.
 - Despite US successes in breaking Japanese codes, such as Purple during WWII, not all codes were broken.
- The Japanese atomic energy and weapons program was not as large financially or geographically as the US Manhattan Project (an assumption that was later to prove false as outlying facilities located in Burma Taiwan, Japanese Occupied China, Manchuria, Singapore, Thailand and Vietnam were to prove).
- While Japan itself held few likely sources of uranium; the Empire held vast sources of the ore.
- More documents related to the program probably exist and are held within classified US and Japanese archives. Some of which would never be released.
- Like the US Manhattan Project, the Japanese program was geographically centered in a large city, Tokyo for Japan, New York City for the US.

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- As the average Japanese could be easily adopted into another family thereby changing his name, and as the use of wartime aliases was common, it would difficult, but not impossible to determine exactly who had been involved in their program.
- The Japanese Imperial Navy and Army had indeed put aside their differences and had cooperated together in the program with the Japanese Army managing the overall program from at least 1943, to the end of the war.
- Unlike the US Manhattan Project, the Japanese probably approached the problem of enriching uranium as an engineering issue, and not a problem for physicists.
- The Japanese had dedicated far greater resources to the project than is commonly thought.
- Japan's "great physicists," so labeled by SCAP during the postwar Occupation of Japan; Yoshio Nishina, Bunsaku Arakatsu, and others were unlikely to have been deeply involved in the military aspects of the program and were unlikely to have been knowledgeable of the entire Japanese effort.
- The Japanese had not organized their science under a government program but behind the face of its larger industrial interests.

Some of the facilities we identified had been previously catalogued, but mischaracterized by IC analysts as supporting other functions. To say that the meeting went downhill from there was an understatement.

The information we presented was viciously attacked as were we personally. As contractors we were simply not allowed to respond with as much venom or with the insulting tone as our attackers. The Air Force officers assigned, perhaps not understanding our position, were seemingly losing faith in our work and our honesty. I was a contractor, we were not allowed to respond to our tormentors in the same manners, with the level of anger that we held inside. We served "at the pleasure of the government." Our officers appeared shocked at the tone of the questions and the behavior of the questioners. One of the worst questions was presented by a representative of the State Department.

The State Department delegate asked us to return to one of our earlier images of what we referred to as a misidentified facility and asked "Just exactly what do you see on that image that says it is a uranium enrichment plant?" I was dumbfounded at the question. Did he think that, at any clandestine effort to enrich uranium there would be a sign on the ground pointing a finger at the supposed illegal activity? As I contractor I responded with my own question, that being "What would you like to see?" He answered "Uranium?" I was again dumbstruck. I was not an expert on uranium enrichment, but I knew enough to understand the process.



A machine gun position, Koto-ri, November 1950/ The area of the underground facility is marked by the arrow.

Uranium is mined from the ground as ore. The uranium and other minerals present in the ore are separated at a supporting ore concentrator. The extracted uranium is then converted to yellowcake. Following additional purification it is lastly converted into a gas known as uranium hexafluoride; also referred to as "hex and UF₆."

At room temperature uranium hexafluoride is solid white material but, because it has a lower than air vapor pressure, quickly transforms into clouds similar to a grey-white fog when exposed to air.

UF₆ is transported and stored in containers, similar to a thermos, at pressures lower than atmospheric pressure. When needed, the container is heated and its contents are piped into the connecting uranium enrichment plant; electromagnetic isotope separation facilities, centrifuges, thermal diffusion plants, etc. Not an expert, but at least knowing that much, how was I to respond to the question I had been asked? Here was an officer of the US government, a sitting member of the NIC, and expert on weapons of mass destruction, looking at an overhead image of a possible clandestine uranium enrichment facility and he honestly expected to see uranium? I was speechless.

Throughout the remaining 45 minutes of the meeting, that member sat to my left in a corner of the room chanting continuously in a falsetto voice, "you're not answering my question, you're not answering my question" over and over again. Despite him, some council members asked questions about the history of the Japanese program; the supporting facilities of the functional areas of the clandestine locations we had identified, and how these facilities might be supporting the current North Korean uranium enrichment program. All the members behaved with caution and skepticism; however that may have been part of the job description. The secretary who had invited us to brief the

council sat at the end of the table with a coy smile and told us it was “always like this.” Really? Had that State Department member been part of a B-52 crew launched on nuclear armed mission to bomb the enemy, and behaved that erratically, another man in that crew would have shot him; another reason why such crews fly with side arms. We were told some days after the debacle that due to his behavior at the meeting, the State Department official had been removed from the NIC. However, the meeting had not been entirely futile.

As the meeting broke up, one man, who was also a member of the President’s Foreign Intelligence Advisory Board (PFIAB) immediately came to our rescue. He urged the two Air Force officers who managed the group to continue the research. He argued that, due to the heated opposition that arose from our first encounter with the committee, it was obvious we had found something of great value; that we had – “struck a nerve no one wanted to talk about.” However in the years since, the PFIAB has become yet another, “self-licking ice cream cone” that serves only to reinforce the president’s foreign policy adventures on a “scientific basis.” The events of November 1950 however, continued to call.

From 1950 through the year 2000, many arm chair generals maintained that 31st RCT had behaved in a cowardly fashion at the Chosin Reservoir. These accusations were mostly based on the comments of the 1st Marine Division commander, General O.P. Smith and a second man, a US Navy Chaplain who were there.⁵⁵ These men who also had their own motives in denigrating the US Army at the Chosin Reservoir – that of the honor of the Marine Corps and US Navy facing a declining future opposite a nuclear-tipped Air Force. Stories told of US Army soldiers, who would not ascend the heights of the main supply route as the retreating column of Marine and Army soldiers fled south, were true – but only after events at Koto-ri, and as will be shown, and for good reason. Ultimately the 31st RCT successfully protected the entire right flank of the 1st Marine Division centered at Hagaru-ri, protecting it from Chinese attack for four days. If not for the presence of the 31st RCT, the Chinese 80th and 81st Divisions could have attacked the critical Marine base and air-strip at Hagaru-ri before the Marines had concentrated sufficient men to defend the area. A Chinese success at Hagaru-ri would have blocked the only escape route of Marines, Naval and other Army units from the trap; leading to a significantly different outcome at the Battle of Chosin Reservoir.



Major General Edward “Ned” Almond

In 2001, 50 years after their sacrifice, the US Navy finally awarded Task Forces MacLean and Faith, the Navy Presidential Unit Citation. Small thanks for such great expense. The US Army, as a large bureaucracy much larger than the Marine Corps had let the issue lay.⁵⁶ The Army was too big to note the loss of some 3000 US and ROKA soldiers on the east side of the reservoir.⁵⁷ In the aftermath of the Battles of the Chosin Reservoir, the retreat from Hamhung and even the Korean War, Generals Henry “Hammering Hank” Hodes, David Barr and Edward “Ned” Almond did little to set the record straight, or recognize the sacrifices of those who served under them. Then as it is now in Iraq, the Army represents the use of force *en masse* and is built to operate within some level of calculated losses. One soldier, or three thousand; it doesn’t matter.

The US Army in ignoring its losses on the east side of the Chosin Reservoir presented the Marine Corps yet one more battle streamer to add to its Iwo Jima flag raising statues located in Washington DC and other locations across the US. The truth of the matter was that in the “what ifs” of life, had Major General O.P. Smith followed the orders he was given and implemented them within the time allowed, subsequent events at the reservoir and within northeastern Korea might have been wildly different.⁵⁸ It was O.P. Smith’s delays in action, and Almond’s refusal to dismiss him that had led to the 31st RCT being sent to the east side of the reservoir.⁵⁹ If Smith would not move as ordered, the US Army would go around him.⁶⁰

4,000 Americans, and an unknown number of South and North Koreans, and upwards of 50,000 Chinese now lay dead, most never knowing why they were fighting over that particular piece of Korea. What was so valuable in the

⁵⁵ The Navy chaplain was Lieutenant Commander Otto Sporer.

⁵⁶ Vallowe, Ray. *What History Failed to Record, A Phantom Force – Lost to History*. 2015, available at: http://koreanwar-educator.org/topics/chosin/vallowe_research/vallowe_ray_book.pdf

⁵⁷ *Ibid.*

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*

⁶⁰ *Ibid.*

mountainous wastelands of North Korea that justified such great loss of life? For those leaders of the battles, whose miscalculations for political purposes had led to the disaster, promotion upward in the ranks soon followed. Major General (two star) O.P. Smith and Ned Almond were subsequently promoted to the rank of Lieutenant General (three star).

At Hagaru-ri on 7 December 1950, the 385 effectives remaining from the 31st RCT, were re-outfitted and reformed into the 31st RCT – Provisional. The unit as created, consisted of three companies. The 31st RCT – Provisional was now assigned to protect the left flank, the eastern side of the Marine column, now retreating from Hagaru-ri to Koto-ri under the command of recently promoted Lieutenant Colonel Berry K. Anderson. It was with this event, in the aftermath of the battle on the east side of the Chosin Reservoir that the story of the cave near Koto-ri began to unravel.

As I researched the subject of Koto-ri for any clues as to what might have taken place, I came across a book written by Glenn Justice, *Fightin' George" Light Infantry*. Mr. Justice served in the US Army as a corporal, "G" Company, 31st Infantry Regiment, 7th Infantry Division during the Korean War from 1950 to 1951. Mr. Justice was at Koto-ri late in the month of November and early December, 1950.⁶¹ How and why he wound up there was an interesting aside.

In his narrative of the events that late November of 1950, Corporal Justice recounted the visit of an unknown officer (Lieutenant Colonel or possibly a Major) to G Company at their encampment north of Hamhung late on the evening of what appears to have been the 27th of November 1950.⁶² That this officer sought out the company commander, Captain Beasley, suggests that the man was of equal or higher rank.^{63, 64}

The officer wanted men of the company to accompany him and a number of other officers first to Koto-ri, and later on to Hagaru-ri to join the 31st RCT, on the east side of the Chosin Reservoir.⁶⁵ The officer argued that there was "strength in numbers," and that, as the remainder of the 31st Infantry Regiment including G Company was too move up to Koto-ri over the next few days, the men he took with him then, would already be at the village when the remainder of the company arrived.⁶⁶ The officer wanted only US soldiers, no KATUSA.⁶⁷ He suggested the use of men from the 57-section; a weapon he considered useless, to comprise the party that would accompany him.⁶⁸ The 57-section manned the M18 recoilless rifle. The M18 was a crew-served weapon which could be used in in anti-tank and anti-personnel roles, but few tanks had been encountered thus far in the advance to the Chosin Reservoir.

The officer may have been accurate in his estimation of the weapon's utility in the situation as it existed in and around the reservoir, and in asking for men from the 57-section. Glenn Justice, and three men; Greer, Camaratta, and a man named Thomas volunteered to accompany the strange group of officers north to Koto-ri.⁶⁹ The men, manning several weapons carriers, headed north in the early morning of 28 November.⁷⁰

Thomas, never made it to Koto-ri and was believed to have died in the mountains just south of the village.⁷¹ The loss of Thomas did not slow the group as the officer, referred to by Glenn Justice as the "OIC" (Officer in Charge), left his escort behind and proceeded on to Koto-ri, leaving the four men to fend for themselves against the attacking Chinese.⁷² Thomas did not survive the encounter.⁷³ As the group ventured north, the battlefield commanders, General Ned Almond, X-Corps, and General Walton Walker, commanding, 8th Army were suddenly pulled from the disaster unfolding north of Koto-ri in the east, and along the Chongchon River in the west, for an emergency meeting with General Douglas MacArthur in Tokyo.

Walker had seen MacArthur only five days earlier, on 24 November, when the SCAP had visited 8th Army headquarters at Sinanju. Departing Sinanju, MacArthur had order the Constellation carrying him to overfly the Yalu River, far north of American lines, without a fighter escort. Almond's departure was so sudden that his staff in Hamhung did not know that he had departed Korea for Japan and called for active assistance in locating their commander.⁷⁴ Walker's and Almond's departure from Korea had been kept secret, even from their own staff.⁷⁵

Once in Tokyo the generals met with:

⁶¹ Justice, Glenn. *Fightin' George" Light Infantry*. Justpub Company. Bainbridge, Georgia. 2001.

⁶² *Ibid.*

⁶³ *Ibid.*

⁶⁴ Telecon, Glenn Justice, 2005.

⁶⁵ Justice, Glenn. *Fightin' George" Light Infantry*. Justpub Company. Bainbridge, Georgia. 2001.

⁶⁶ *Ibid.*

⁶⁷ *Ibid.*

⁶⁸ *Ibid.*

⁶⁹ *Ibid.*

⁷⁰ *Ibid.*

⁷¹ *Ibid.*

⁷² *Ibid.*

⁷³ *Ibid.*

⁷⁴ Stanton, Shelby L. *America's Tenth Legion: X Corps in Korea, 1950*. Presidio. Novato, CA. 1989.

⁷⁵ Appleman, Roy R. *East of Chosin: Entrapment and Breakout in Korea, 1950*. Texas A&M University Press. College Station. Third Printing. 1991.

- General of the Army, Douglas MacArthur.
- Vice Admiral Turner Joy, Naval Forces Far East, commanding.
- Lieutenant General George Stratemeyer, Far East Air Force, commanding.
- Major General Doyle Hickey, chief of staff, Far East Command.
- Major General Charles Willoughby, Far East Command, chief of intelligence (G-2).
- Major General Courtney Whitney, Advisor to MacArthur's staff.
- Brigadier General Edwin K. Wright, Far East Command, military operations (G-3).

There were no records made of the meeting. Even had there been a prepared Memo for the Record, it would have only stated what the participants were willing to put on paper. With MacArthur's earlier promise to President Truman at Wake Island on 15 October that, "if the Chinese tried to get down to Pyongyang, there would be the greatest slaughter," with his "home by Christmas offensive" being clearly now at peril, it is unlikely at this point in the Korean War that the general would have committed his opinions to paper.⁷⁶ Whether the group ever discussed the wartime Japanese atomic bomb program in Korea remains unknown, but what is known is that they were all well aware of its existence.

During the postwar era there had been three or more separate investigations into Japan's wartime atomic energy and weapons program. The first was conducted in the immediate aftermath of the Japanese surrender in August 1945. The investigation lasted only six weeks; from early September to mid-October 1945. The report of its findings was written by Robert Furman, of *Alsos* fame, but also largely dictated by Dr. Yoshio Nishina – the supposed head of the Imperial Japanese Navy and Army's wartime atomic weapons research effort. The *Alsos Mission* was an organized effort by a team of United States and British military, scientific, and intelligence personnel to uncover German and Italian scientific developments during World War II. Its primary focus was German nuclear energy project, but it also investigated German advances in chemical and biological weapons and the means to deliver them. Furman's report mirror-imaged the American Manhattan Project onto to war-torn Japan. Manhattan Project investigators were disappointed when they failed to find any similar Oakridge- or Los Alamos-type facility in Tokyo.

In his report, Furman argued the Japan lacked the uranium necessary to develop such a weapon and had never organized its science to support such an effort, and had accomplished little more than to build one thermal diffusion column which was destroyed by American air raids in April of that year. Furman was entirely wrong, but succeeded in setting the stage for what happened to Eric Hehl and me in 2007. Robert Fisher, also of *Alsos* fame had however conducted a deeper investigation into Japan's wartime projects in early 1946.

In his investigation Fisher ripped apart the earlier findings of Furman, the US Navy (USNAVTECH), and a report of investigation written by a distinguished group of scientists who had visited Japan immediately after the war led by Arthur Compton known as "*The Compton Report*." According to Fisher, postwar US investigators had widely missed the mark; they had not sufficiently investigated the issue to discover exactly what the Japanese had achieved with their wartime atomic research program. The occupation-era US Army was too eager to go home, and had long-since swallowed published myths about the wartime success of the once super-secret Manhattan Project.

In early 1946 Fisher confronted Japanese scientist Bunsaku Arakatsu with evidence of the Imperial Japanese Navy's atomic weapons program, and reinvestigated all of the facilities visited by all earlier American investigators. Fisher also uncovered further evidence of deeper German-Japanese wartime cooperation on the subject, and discovered how "Japanese science" had been organized behind Japan's economic zaibatsu, and not in some government-sponsored Manhattan Project. It was Fisher who realized that during the war, Yoshio Nishina was working on what the US would refer to nonsensically in the postwar period as a "death ray." Nishina's "so called" death ray was actually strong microwave systems. Nishina had worked on the issue as a method of exploding whatever weapon the Japanese were developing in Korea, as the US did at Hiroshima and Nagasaki; in an "airburst" over the invading US force that was expected to attack Kyushu, in November 1945.

Fisher's investigation was by far the most complete of all those that investigated Japan's wartime atomic energy and research program; he had uncovered new evidence, reinvestigated previously visited facilities, detained Japanese scientists, confirmed German involvement and so on. Fisher's findings and reports of his visit to Japan remain classified. Fisher left additional findings, advising further investigations, with Harry C. Kelly, who had only recently arrived in Japan to serve as a scientific-technical adviser to the SCAP in its Economic and Scientific Section (ESS). Kelly's orders were however far different than those of Robert Fisher,

Unlike Robert Fisher, Harry C. Kelly's mandate was not to investigate Japan's various wartime atomic energy and weapons programs, but to rebuild Japanese science in support of a reordered Japan. Kelly largely ignored wartime

⁷⁶ "Substance of Statements made at Wake Island Conference, dated 15 October 1950, compiled by General of the Army Omar N. Bradley, Chairman of the Joint Chiefs of Staff, from notes kept by the conferees from Washington. Papers of George M. Elsey." Harry S. Truman Presidential Library and Museum. Retrieved 7 September 2011.

Japanese efforts to develop atomic weapons. Pressed by SCAP authorities after the 1946 release of the Snell article, Kelly ordered his close associate, Yoshio Nishina, to investigate the Japanese wartime programs and report any progress that the Japanese might have made. Kelly, as SCAP's scientific and technical advisor denied internally and publicly that Japan's wartime bomb program had met with any success.⁷⁷

Kelly was the first bureaucrat in a long chain that stretches back to the end of WWII, to circle the wagons to protect the government from expending any resources to investigate more thoroughly what the Japanese had or had not accomplished, over the course of its wartime atomic energy and weapons research program in Japan, China or Korea. It was Kelly who set the bureaucratic flag in concrete over the mound of US governmental lies, regarding what the Japanese government and scientists had or had not accomplished during the war – and what portions of their program were left on the Korean Peninsula in 1945 – which would continue to plague the US to this very day with North Korea. Once Kelly had planted the flag, for the bureaucracy to have admitted the error would have proved awkward, and would become increasing more awkward as the years and decades passed and formerly sensitive documents were released to the public.

In early 1947 Nishina issued his report to Kelly, who promptly filed it away to be forgotten. Despite Kelly's mandate, subsequent, unknown events of 1948 were to result by 1949, in all Japanese physicists being placed under constant US surveillance.⁷⁸ Kelly was also thoroughly familiar with post-war OSS X-2, code name "RAMONA" reports of Japanese wartime atomic research efforts outside of Japan and Korea, in China during the war.

In the immediate postwar period, the State Department took over all wartime OSS functions through 1947, when the Central Intelligence Agency (CIA) was created to consolidate intelligence reporting. ESS, and Kelly, as one of only several offices assigned to SCAP that might have been aware of Japan's wartime bomb effort, was "info copy" on all message traffic concerning scientific matters originating within the OSS and later the State Department. Kelly was fully aware of the discrepancies between public perceptions of Japan's wartime bomb programs, and the secrets revealed in classified OSS message traffic.

OSS X-2 RAMONA traffic had identified a completely different set of scientists; not Yoshio Nishina and Bunsaku Arakatsu, as heading Japan's wartime programs.⁷⁹ That same reporting had identified portions of Japan's program as being located in China, Korea, Manchuria, Taiwan, etc..⁸⁰ Most of those who had actually headed Japan's actual program were engineers and mathematicians, not physicists. That traffic also depicted the Soviet Union and Nationalist Chinese as being aware of the existence of Japanese laboratories located in those same areas prior to the end of the conflict, and seeking to occupy and control those same facilities following the war.⁸¹ The communist Chinese were identified as too agrarian and coarse to know what they had found when they had found it; using the scientific papers found therein to feed fires to boil their rice, and the sensitive equipment to make ovens.⁸² In all fairness to Kelly however, he did wear two hats.

As the eventual head of ESS Kelly had to report to SCAP his interactions with Japan's top scientists, and represent Japanese science to the US military government. Through his chain-of-command, Generals Hickey, Willoughby, Whitney and Wright, if not MacArthur himself, would have been fully aware of Kelly's activities if not also Admiral Turner Joy and George Stratemeyer.

Over the course of his four years in Japan, Kelly worked, as did most Americans in Japan, to destroy Japan's martial heritage and emasculate the country. America needed new myths; journalists and historians sought to maintain the status quo. In January 1950, nearly six months before the start of the Korean War, Kelly, possibly worn from four years of duplicity, left Japan. Despite his close ties to Japan, Kelly would not return to Tokyo until the 1960s. In 1969, Kelly was awarded the Order of the Sacred Treasure, Second Class by Japanese Emperor Hirohito, the highest honor the Japanese bestow on a foreigner. Ironies of ironies, Hirohito was also fully aware of Japan's wartime atomic bomb program. It was the secret funds of the Japanese Emperor that paid for the program.

At the Japanese war crimes trials held in Tokyo through 1948, US investigators were eager to show the Japanese Imperial Army and Imperial Navy as corrupt, completely incompetent, and only bent on conquering the world. No one was ever shown how or why Japan wanted to accomplish such goals.

The Japanese government and its people fell in-line behind the myth because it suited their needs as being the "victim" of the war, and not the aggressor. Ultimately the US needed Japan as a bulwark against communist expansion in Asian, and signed a peace treaty restoring complete Japanese sovereignty in September 1951, more than a year after

⁷⁷ Dees, Bowen C. *The Allied Occupation and Japan's Economic Miracle*. Curzon Press Ltd. The Japan Library. 1997

⁷⁸ *Ibid.*

⁷⁹ Office of Strategic Services, China Theater. X-2 Branch. Report. *Ramona*. Record Group 226. Stack Area 250. Row 64 Compartment 33. Shelf 2. Entry 211. Box 34. The US National Archives and Records Administration, 8601 Adelphi Road, College Park, MD

⁸⁰ *Ibid.*

⁸¹ *Ibid.*

⁸² *Ibid.*

the start of the Korean War. Generals MacArthur, Willoughby, Hickey and Wright were heavily involved in discrediting the WWII-era Japanese military and in concluding that peace treaty.

These men were fully aware of what postwar US investigators had uncovered about what Japan had, and had not accomplished in their wartime research program to unlock the secrets of the atom. It is near inconceivable that such information, and that of chemical and possibly biological weapons did not weigh heavily on their conversation the night of 28 November in Tokyo as some of those same weapons and laboratories had already been found in Hamhung.⁸³ These were the men who had covered up Japan's notorious biological warfare experimentation center, Unit 731, in Ping Fan, China. These were the same men that downplayed Japan's chemical weapons program and turned its wartime weapons production center at Okunoshima, into a nature preserve, now known as Rabbit Island.

Reports emanating from the meeting of 28-29 November suggest that the meeting only discussed events in Korea, primarily the massive Chinese attacks against UN forces on the peninsula, but as there were no minutes or secretary to record what was said, no one other than the participants really knows what was and was not said. Throughout the course of the Korean War, General Stratemeyer would order his bombers to destroy and disrupt North Korean monazite mines (a source of thorium) then sending their product into Soviet Russia.⁸⁴ US Special Forces working with Korean guerrillas would attack and destroy additional North Korean monazite mines whenever and wherever they could find them.⁸⁵ That monazite now sits across sites in modern-day Russia and represents a near-ecological disaster as thorium seeps from the monazite into neighboring streams and waterways.⁸⁶

At the Tokyo meeting, General Almond is reported to have expressed optimism that his Tenth Corps could continue their advance north to the Chinese border. Walton Walker believed that he could withdraw into and hold a line north of Pyongyang.⁸⁷ No decisions were reached at the meeting which ended at about 0130 hours in Tokyo on 29 November 1950. Hours later, in Washington DC that same day, President Harry Truman asked by a reporter at a morning press conference held in the wake of the Chinese intervention if there was "active consideration of the use of atomic bomb?" responded, "There has always been active consideration of its use." When asked again to confirm "active consideration," Truman confirmed that the weapons had always been under consideration as "one of our weapons." He also stated that, "the military commander in the field will have charge of the use of weapons, as he always has."⁸⁸ MacArthur now had the bomb.

Before the two commanders left Japan that morning at nearly 12 noon local time, Walton Walker was asked to hold a line above the North Korean capital of Pyongyang, General Ned Almond was ordered to withdraw Tenth Corps into a perimeter surrounding the North Korean city of Hamhung. It was a startling turn of events, perhaps far more than was necessary to deal with the "hordes" or Chinese streaming across the Yalu River. What had caused the abrupt decision by General of the Army Douglas MacArthur to abandon the battlefield? What had caused President Truman in Washington DC to allow himself to be drawn into commenting on the use of the atomic bomb on the battlefields of North Korea? Looking back fifty years after the event, the analytic mind wondered.

In the years after the Korean War many would argue that the Chinese could never bring forth the military power required to defeat US forces in the field. Those analysts believed the invading Chinese simply wanted to isolate and starve out the intruding Americans. However to the Generals meeting in Tokyo in November 1950, it seemed that the Chinese had apparently brought forth that power and forced those US armies to retreat.

Many would argue that the withdrawal from the Chosin Reservoir was required because of the inability of the US to supply its forces by air or along the dirt road north to the lake. However the US and its allies could support similar such forces on similar such roads throughout a line drawn near the former 38th Parallel throughout the remainder of the Korean War. That line would later become known as the Demilitarized Zone (DMZ) which currently separates a nuclear-armed North Korea from the South. It would seem that if the US wanted the Chosin Reservoir as much as it had wanted Bastogne during the Battle of the Bulge against Nazi-Germany, it would have kept it. What caused the about face?

In the days following the Tokyo meeting, the once aggressive Walton Walker was reported to have become "more reflective, and remarkably candid in revealing his frustrations."⁸⁹ As for Almond, on the 4th of December as he awarded the Distinguished Service Cross to General O.P. Smith, Colonels Litzenberg and Murray at Hagaru-ri, Almond was

⁸³ Record Group 319: Records of the Army Staff, National Archives. Adelphi Maryland.

⁸⁴ Stratemeyer, George. *The Three Wars of Lt. Gen. George E. Stratemeyer. His Korean War Diary*. Edited by William T. Y'Blood. Air Force History and Museums Program. 1999.

⁸⁵ Evanhoe, Ed. Dark Moon, *Eighth Army Special Operations in the Korean War*. Naval Institute Special Warfare Series. Annapolis Maryland. 1995.

⁸⁶ *Radioactive Waste Removal – Krasnoufimsk, Russia*. Pure Earth. <http://www.pureearth.org/project/krasnoufimsk-radioactive-waste-removal/>

⁸⁷ Toland, John. *In Mortal Combat: Korea, 1950-1953*. William Morrow and Company, Inc. New York. 1991.

⁸⁸ *The President's News Conference. November 30, 1950*. Harry S. Truman Library and Museum.

<http://trumanlibrary.org/publicpapers/viewpapers.php?pid=985>

⁸⁹ Toland, John. *In Mortal Combat: Korea, 1950-1953*. William Morrow and Company, Inc. New York. 1991.

noted as “weeping.”⁹⁰ Observers were unsure if it was the cold or the stress of the last several days.⁹¹ At this point, it probably really didn’t matter.

In the end, Walton Walker was to lead the longest retreat of the US Army in American military history from a point near the North Korean border with China, south past the South Korean capital of Seoul. In the headlong retreat from the Chongchon River, the US 2nd Infantry Division would be nearly completely destroyed in running what became known later as the “Gauntlet.” However during parts of the Eighth Army’s retreat, more than 40 miles would separate the hotly pursuing Chinese from US and ROK army units rushing south that December. On the 23rd of December 1950, Walton was, similar to his mentor George S. Patton in Germany in late 1945, was involved in a military-related car accident which killed him. The two men, Patton and Walker, died exactly five years and one day apart. Tenth Corps would eventually retreat entirely out of North Korea through Hamhung and other locations. By the end of December 1950 that US forces had once occupied Hamhung was no more than a fading memory. But for Corporal Justice now approaching Koto-ri on the 28th of November all that lay in the future.

Corporal Justice would see the OIC at Koto-ri several times over the next few days but would never get his name, nor was he at any subsequent point in his life, was he able to identify the man.^{92,93} He would not be alone. So who was this “unknown officer” that led a small group of other officers north to Koto-ri on the night of 28 November 1950? The answer to some of these questions probably lay in the Manhattan Project operations undertaken at the end of WWII in Germany and later Japan – *Alsos*.

During WWII the US Manhattan Project dispatched an investigation team to Europe that would follow behind the Allied advance toward Germany, to examine any advanced technology they might come across, primarily any German interest in atomic weapons. The unit was known as the *Alsos* team. *Alsos* had followed the Allied advance into Italy in late 1943 and late into France in 1944 and on to Germany in 1945. A similar such team followed US forces into Tokyo in the aftermath of Japan’s surrender in August 1945. The two units had several things in common, such as their interest in atomic weapons. Another similarity is the presence on both teams of Major Robert Furman, known in later reports of the unit known as *Alsos*, as the “mysterious major.”⁹⁴ Though it would stretch the realm of possibility that Furman, as described in Robert Wilcox’s work *Japan’s Secret War: Japan’s Race against Time to build its Own Atomic Bomb* and by Samuel Goudsmit in his post-WWII book *Alsos*, was the same officer that led the small group of men north out of Hamhung to Koto-ri on 29 November 1950, the methods of the two men and the units they headed were tremendously similar.^{95,96} All three groups:

- That in Germany, Japan, and possibly, later in Korea, followed advancing troops.
- Fell under the control of the US Army.⁹⁷
- Operated from frontline reports of activities; information of located facilities relayed back to a higher headquarters, which then provided that information to the group’s commanders.⁹⁸
- Had foreknowledge of some possible facilities and scientists involved and had advanced on their own to capture such locations and interrogate scientists.
- Were headed by regular, not reserve, Army officers.
- Had the authority to command units not in their chain of command to do their bidding.
- Were made up of primarily of US Army officers but were in reality comprised primarily of civilian scientists posing as US Army officers.⁹⁹
- Usually wore the rank of an officer, often artillery insignia, and sought to hide their true identity.¹⁰⁰
- Were on a mission not to be derailed by events related to the combat surrounding them.
- Were vaguely similar to subsequent events 50 years later in Iraq.
- Left little in the way of reports for subsequent historians to use in tracking their movements and investigations. Were initiated in the face of some great cause for alarm, such as suspicions that Germany was developing an atomic bomb, or as in the case of Korea; the discovery in Hamhung of some facilities AEC

⁹⁰ *Ibid.*

⁹¹ *Ibid.*

⁹² Justice, Glenn. *Fightin’ George” Light Infantry*. Justpub Company. Bainbridge, Georgia. 2001.

⁹³ Telecon, Glenn Justice, about 2005.

⁹⁴ Goudsmit, Samuel A. *Alsos*. American Institute of Physics. Woodbury, New York. 1947/1996.

⁹⁵ Wilcox, Robert K. *Japan’s Secret War: Japan’s Race against Time to build its Own Atomic Bomb*. Marlowe & Company, New York. Copyright 1995.

⁹⁶ Goudsmit, Samuel A. *Alsos*. American Institute of Physics. Woodbury, New York. 1947/1996.

⁹⁷ *Ibid.*

⁹⁸ *Ibid.*

⁹⁹ *Ibid.*

¹⁰⁰ *Ibid.*

was “not excited about.” Which the commission did “not intend to send any of its officials to North Korea,” even though those facilities could be connected to the atomic weapons program of the Soviet Union.¹⁰¹

- Developed the initial lists of scientists under Operation Overcast, later known as Operation Paperclip, which allowed some German scientists to immigrate to the US to continue their wartime research.¹⁰²
 - A similar such effort later allowed some Japanese scientists, such as Hideki Yukawa and Paul Kazuo Kuroda, both alumni of Japan’s WWII-era Ni-go atomic bomb effort, to visit or immigrate to the US to do the same. Because of racial stigmas, most Japanese scientists remained in Japan where they were there employed on US sponsored programs like those at the Noborito Institute – a laboratory of the Imperial Japanese Army which conducted research into special weapons.
 - It is likely that the US Army did the same for any Korean scientists similarly identified in Korea following the Korean War.
- Were usually commanded by a much higher ranking officer than that present on the scene, such as Lieutenant General Leslie Groves for the efforts at the end of WWII, and perhaps General of the Army Douglas MacArthur in Japan.¹⁰³

With such knowledge in mind, we dug deeper into the activities of the US Army in and around the town of Koto-ri, North Korea, in November 1950. Now under greater scrutiny the currently identified and targeted facilities across North Korea, IC approved and the story of the events that occurred near the Chosin Reservoir as related to the Japanese atomic weapons and energy program of WWII continued to unravel.

As stated earlier, on 2 December 1950, the survivors of the massacre of the 31st RCT, now designated Provisional Battalion US Army, 31st Infantry “Prov Bn, USA (31st Inf)” by the 7th Marine Regiment, were rearmed and reorganized into four separate companies.¹⁰⁴ If one includes the tank force, who had earlier attempted to reach the east side of the reservoir and other US Army personnel now at Hagaru-ri, the Provisional Battalion now numbered 804 men.¹⁰⁵

Once established the unit was attached to the US 7th Marine Regiment and assigned to protect the left flank, the east side of the Marine column, now attacking south out of Hagaru-ri to Koto-ri in an attempt to breakout from the Chinese Army divisions now rapidly surrounding the perimeter. On 6 December 1950, the Marine column, its left flank now protected by the 31st RCT – Provisional, moved toward Koto-ri. Attacking southward into the mountains surrounding the main supply route, the road south to Koto-ri, the men would face numerous log bunkers manned by stubborn Chinese and North Korean soldiers. 38 hours later, on 7 December, the column entered the Marine perimeter at Koto-ri.¹⁰⁶

As many people as possible were put into warming tents that night. Most had to feed themselves and many went hungry.¹⁰⁷ Nearly seventy years later, no one really knew how many men there were within the perimeter of the Koto-ri.

Due to the large number of casualties sustained in the advance south from Hagaru-ri to Koto-ri, considerable reorganization of the group was now required. Only two companies of hardcore and lucky survivors of the Army battle at the east side of the reservoir, and the march south from Hagaru-ri, were all that could be assembled – about 200 men. They would now be tasked by the “mysterious” officer that had only days before approached Koto-ri from the south with a small group of additional officers as recorded by Glenn Justice.¹⁰⁸

As events were to show, the mysterious officer was not as mysterious as it appeared. It appears likely that he was in fact a man assigned to the 31st RCT, a regular Army, and not a reserve officer. The man had only recently, just days before, been promoted from Major to Lieutenant Colonel, accounting for some of the previous, and much of the later confusion regarding his rank - Lieutenant Colonel, Berry K. Anderson.

Major Anderson was somewhat an enigma. Within the 31st RCT, Anderson served as the unit’s S-3, operations and training officer. He can be identified as being at Hagaru-ri from about 24 November until the 28th, when he was last seen in the area of Hudong northeast of Hagaru-ri in the company of then, Brigadier General Hank “Hammering Hank”

¹⁰¹ *Identify Ore Plant in Korea*. Waterloo Daily Courier. Waterloo, Iowa, Wednesday, October 25, 1950

¹⁰² Goudsmit, Samuel A. *Alsos*. American Institute of Physics. Woodbury, New York. 1947/1996.

¹⁰³ *Ibid.*

¹⁰⁴ Vallowe, Ray. *What History Failed to Record, A Phantom Force – Lost to History*. 2015, available at: http://koreanwar-educator.org/topics/chosin/vallowe_research/vallowe_ray_book.pdf

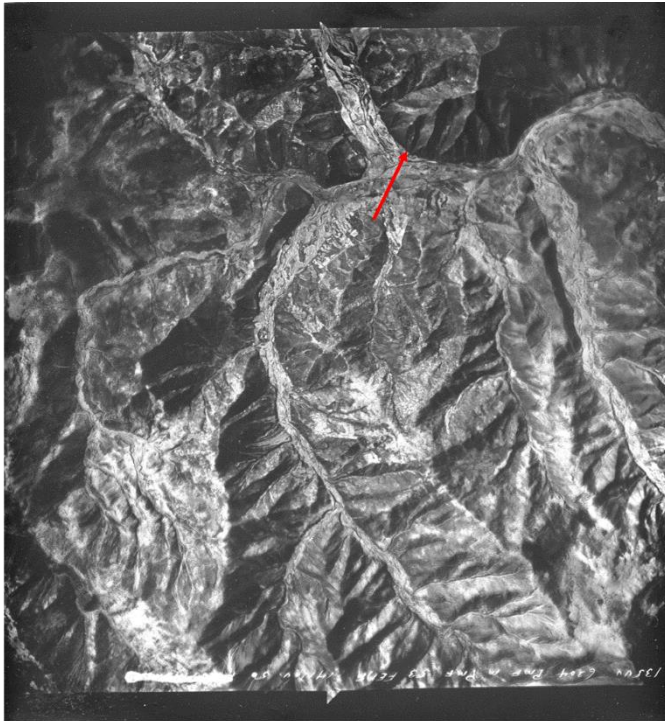
¹⁰⁵ Appleman, Roy R. *East of Chosin: Entrapment and Breakout in Korea, 1950*. Texas A&M University Press. College Station. Third Printing. 1991.

¹⁰⁶ Rasula, George A. *THE CHOSIN CHRONOLOGY Battle of the Changjin Reservoir, 1950*. 2006

¹⁰⁷ *Korean War: Death of Task Force Drysdale*. 6/12/2006 • MILITARY HISTORY <http://www.historynet.com/korean-war-death-of-task-force-drysdale.htm>

¹⁰⁸ Justice, Glenn. *Fightin’ George” Light Infantry*. Justpub Company. Bainbridge, Georgia. 2001.

Hodes, US Army.¹⁰⁹ Hodes had arrived at Hudong via helicopter, which he soon used to return to Hamhung, most likely with now, Lieutenant Colonel Berry K. Anderson. After the 28th of November, Anderson appears to have been only been in contact with his command via an SCR 300 radio that linked him to Major Carl Witte, commander of the 3rd Battalion, 31st Infantry 31st RCT – Provisional as reorganized at Hagaru-ri.



Gun Camera Film; taken on 14 Nov 1950 as the Marines moved north to the Chosin Reservoir. The red arrow marks the location of the underground facility.

Over the course of the next several days, Anderson appears to have been in irregular contact with Major Witte, and rarely communicated with Major Robert E. Jones, now commanding the 32nd Infantry battalion, of the same reorganized unit. Prior to the disaster on the east side of the Chosin Reservoir, Witte served with Anderson in the office of the S-3, 31st Infantry Regiment and appears to have been one of Anderson's supporters.¹¹⁰ Neither Anderson, nor Witte, had ever gotten further north than Hudong during the advance north to the east side of the Chosin Reservoir and were never directly involved in that fight. Somewhat to the contrary, in the fight on the east side of the Chosin Reservoir, Major Jones had been one of its true heroes serving under the command of Don Carlos Faith. In his book, *Chosin: Heroic Ordeal of the Korean War*. Eric Hammel gives Anderson short shrift.¹¹¹

According to Hammel, Anderson was "seen by his subordinates as being a rather overbearing individual, had just been promoted lieutenant colonel. Considering that he had served with the regiment for well over a year, he had made himself throughout unbearable during the previous week by chastising the many subordinates which had made the natural error of addressing him as "Major," the

title by which he had been known until only a week earlier. It is a characteristic that many of those who knew and encountered Anderson at Koto-ri would long remember. Hammel noted that "Anderson always acted in a decisive, correct manner when there were senior present, but did nothing – nothing at all" the night of the 27th of November when the Chinese attacked the American Army and Korean KATUSA east of the reservoir.¹¹² As Hammel stated "The Chinese did not molest Lieutenant Colonel Barry Anderson that night, and he did nothing to molest them."¹¹³ Major General O.P. Smith, commander was only slightly less disparaging.

In an interview given after the war, Smith remarked "Well, Anderson was a pretty good fellow; he tried to get them under control and get them back. Litzenberg had to take on of [sic] the regular battalions to send up there to take over. Anderson brought charges later against some of the officers. According to the word I got later he was put in a psychiatric hospital in Tokyo."¹¹⁴ In his more than 1100-page work, the *Forgotten War*, author Clay Blair would mention Anderson's name a total of seven times; writing four years later, noted historian John Toland, author of *In Mortal Combat, Korea, 1950-1953* never mentioned Anderson once.¹¹⁵

Though the nature of his illness is not known, Anderson was eventually relieved of command and evacuated through medical channels to Yakota Air Base, Japan and subsequently to the US.¹¹⁶ Regardless, at Koto-ri on 7 December 1950, Anderson now ordered the 200 remaining officers and troops of the 31st Infantry 31st RCT – Provisional, to attack and take control of the hills northwest of the perimeter – the area of the cave. One Marine officer, a major at the time of the retreat from the Chosin Reservoir would, some fifty years later still remember the cave or underground

¹⁰⁹ Rasula, George A. *THE CHOSIN CHRONOLOGY Battle of the Changjin Reservoir, 1950*. 2006

¹¹⁰ *Command Report: 1 thru 11 December 1950* (3rd Battalion, 31st Inf). RCT 31. 11 March 50. US National Archives, Adelphi, Maryland.

¹¹¹ Hammel, Eric. *Chosin: Heroic Ordeal of the Korean War*. Presidio. Novato, CA 1981

¹¹² *Ibid.*

¹¹³ *Ibid.*

¹¹⁴ Roe, Pat. *General O. P Smith Interview*. <http://www.chosinreservoir.com/smithinterview.htm>

¹¹⁵ Blair, Clay. *The Forgotten War. America in Korea, 1950-1953*. Times Books. Random House. New York. 1987; Toland, John. *In Mortal Combat: Korea, 1950-1953*. William Morrow and Company, Inc. New York. 1991.

¹¹⁶ Stutzman, David. *SOLDIERS' STORIES VOLUME II, Volume 2*. 2015.

facility.¹¹⁷ He mostly recalled seeing the lights that had been moved across the river and men working outside the cave's entrances at around 0400 hours the morning of 8 November as he and his troops moved into the perimeter at Koto-ri.¹¹⁸

The ghost of the "mysterious major" of WWII fame, was now in control of the cave where Japan had supposedly assembled its atomic bomb, had possibly built an early form of a reactor, or some other rudimentary uranium enrichment facility.¹¹⁹ Perhaps that same ghost hovered over our efforts to determine the truth about the Japanese atomic energy and weapons program of WWII.

In the aftermath of 9-11 long-term analysis was out, results-driven moment-by-moment analysis now took front stage. The days of the monk-scribe who spent a lifetime studying one type of missile or one type of installation, were over.



Area of the cave enlarged from film of 14 November 1950

Briefings were now limited to several slides or less. The size of the brief was limited to something that could be presented in an "elevator meeting." Such meetings had become the norm as harried DIA bureaucrats, now fighting the Global War on Terrorism (GWOT), no longer had time for the detailed analysis that marked the Cold War. Reporting up the chain-of-command was now reduced to a "CNN moment," a "drive-by" presentation, whose accuracy was always in question. DIA even built its own classified-level, closed circuit television network to broadcast briefings to already busy government bureaucrats and overworked commanders. As the GWOT expanded and demands for personnel grew, analysts were moved from one subject to the next to support each new crisis.

Each time we were scheduled to meet with the NIC or its underlings such as the CIA's Weapons Intelligence, Nonproliferation, and Arms Control Center (WINPAC), we were told to prepare in advance and bring material to support some number of pending issues and yet, when we arrived, the entire agenda had changed. We were as they would say "sandbagged."

The purpose of our being undermined was to leave any persons of great importance who might have attended

these meeting with the perception that we were misguided, uniformed, unprepared and unimportant. The degree of intellectual honesty the NIC displayed as we briefed the facilities and clandestine installations we had found in our search for the facts about Japan's wartime atomic bomb and research program and the North Korean uranium enrichment program was less than awe inspiring. Those of my office who had attended the meetings, greatly resented how we, and the validity of the information we had uncovered, were abused and ignored.

One such meeting was held at the CIA's main headquarters briefing room at the much vaunted Langley. More than 40 people attended the show. The briefing room was a large auditorium-like chamber with dim lights. We were invited to bring paper copies of our briefing to share with the group and led to believe that we were going to be using a small room with no softcopy briefing capabilities. Several of the CIA's attending analysts came prepared with copies of Robert Wilcox's *Japan's Secret War: Japan's Race against Time to build its Own Atomic Bomb*, others had a copy of Joseph Mark Scalia's *Germany's Last Mission to Japan: The Failed Voyage of U-234*.^{120,121} In the dimly lit room we were once made again to appear ill-prepared, uniformed and unimportant as we did not possess the foresight to bring the brief softcopy. Once again the skeptics raged and we were stung by many comments and opinions – but no actual facts.

¹¹⁷ Telecon interview with retired Brigadier General Edwin H. Simmons, US Marine Corps. 2003.

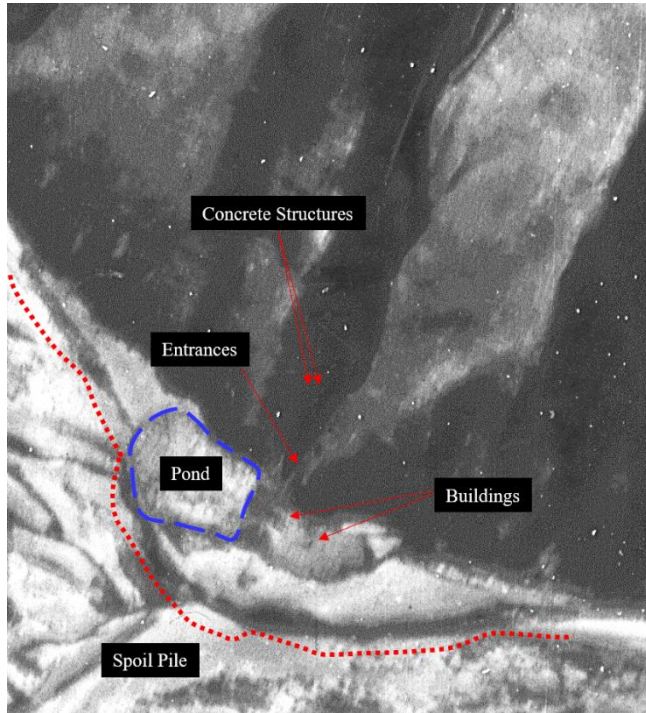
¹¹⁸ *Ibid.*

¹¹⁹ Goudsmit, Samuel A. *Alsos*. American Institute of Physics. Woodbury, New York. 1947/1996.

¹²⁰ Wilcox, Robert K. *Japan's Secret War: Japan's Race against Time to build its Own Atomic Bomb*. Marlowe & Company, New York. Copyright 1995.

¹²¹ Scalia, Joseph Mark. *Germany's Last Mission to Japan: The Failed Voyage of U-234*. Naval Institute Press, Annapolis, Maryland. 2000

Many of the analysts appeared angry at having had to attend the brief. That many of the people who attended had apparently graduated from US Army Special Forces to become analysts at the CIA, was apparent. They seemed to think that their physical presence was sufficient enough, as they leaned across the table, to end to our endeavor to shed



light on the murky history of North Korea's effort to develop nuclear weapons. I for one, wasn't impressed. I know Eric wasn't frightened. Dr. Hehl had been a stalwart of the research. Eric and I had previously met some of these analyst during our earlier work on biological warfare. No matter the time or the place, in the arena of ideas and facts, these analysts were always ill-equipped.

It was clear that our efforts were unwelcome in the ivory tower of the CIA. In the battle for future funding, we obviously did not travel the three martini route of dark Washington DC restaurants, and contractor-paid-for-lunches that seemed to dictate government policy. Some red-nosed government personnel we encountered on our tour of DC reeked of alcohol long before noon. Perhaps alcohol was what it took to survive the myriad of bureaucratic lies and ineptitude protected by these agencies, committees and their members. Perhaps revelations about some cave, the end of WWII, and the events at Koto-ri in early December 1950 were more than they wanted to know – too much information.

What happened along the Changjin River nearly 55 years earlier is sketchy as few survivors of the events

on the east side of the Chosin Reservoir and later events at Koto-ri remain. But some of these veterans were still around in the mid-1980s when I had originally began my research, and they talked, drew maps and recounted the events of late November 1950. Ironically, told not to discuss the events of the Korean War except through Army public relations officers, it was President Clinton's Executive Order 12958 concerning Classified National Security Information issued on 17 April 1995 that gave them their voice. Although he would not talk with me about the events of that time and was suspicious of my questions, in his writings, Colonel George A. Rasula, US Army: Retired described the mood and the scene on the morning 7 December as of the 31st RCT – Provisional once again advanced northward. According to Rasula:¹²²

"Members of Reidy's 2/31 who had been at the entry into the Koto-ri perimeter told us later they could not recognize Army soldiers because they came by in a variety of outer garments picked out of the Hagaru-ri supply dumps. Most soon found the 2/31 tents near the south end of the Koto-ri perimeter, there finding space in a tent to sleep. I went to the 2/31 CP tent where I enjoyed a cup of hot coffee and had a brief chat with those present, including LTC Reidy who seemed to avoid conversation. Anderson organized one scratch group of soldiers that was send back north to hold a piece of key terrain along the road while the remainder of the units withdrew into Koto."¹²³ Whether Anderson *rallied* the soldiers for one more effort or simply ordered them north is not known.¹²⁴ The advance was placed under the control of Major Robert E. Jones. The "piece of key terrain" was the aboveground area containing the cave. About 100 men would accompany Jones in taking the ground surrounding the underground facility.¹²⁵

Jones formed his men into two distinct groups; one to scale the heights of the mountain housing the facility, the others to approach its entrances more directly through the mouth of the valley. Moving westward, the soldiers first crossed the Changjin River. On the opposite shore they then climbed a high bank of dirt and stone, much like a dike along a river. Once over the dike they crossed an ice-covered pond, housed between the dike and the mountain. The two groups now began to separate; one scaling the mountain, the other approaching the mouth of the small valley. Several small buildings stood atop a flat area of ground just north of the entrance to the valley. A few destroyed

¹²² Telecon with George Rasula, 2005.

¹²³ CHANGJIN JOURNAL CHANGJIN JOURNAL 02.28.03. <http://bobrowen.com/nymas/Changjinjournal030228.html>

¹²⁴ Telecon interview with Blas Luis "Mike" Nazario, 2003.

¹²⁵ CHANGJIN JOURNAL CHANGJIN JOURNAL 02.28.03. <http://bobrowen.com/nymas/Changjinjournal030228.html>

buildings lay to their left, the south, as they scaled the mountain. The men now began to scale the river's actual bank to ascend the heights above.¹²⁶

The southernmost group, those scaling the mountain were given a head start. After some minutes, the northernmost group of men entered the mouth of the valley directly, approaching the underground facility's entrances from their left. There the lower group were confronted by a Chinese machine gun emplacement over the facility's entrance. Fire from the group above and below silenced the machine guns and eliminated their operators. There were actually two entrances; both partially dirt covered as if there had been some previous attempt to conceal them.¹²⁷

Toward the end of the small valley there rose skyward two large rectangular concrete structures, some 25 foot by nearly 40 foot long. The northernmost group now took control of the area of the entrances leading to the underground facility.¹²⁸ The men then began to use their combat shovels to dig around the large, apparently solid, concrete structures in an attempt to discover a third or fourth entrance to the underground facility that lay below. No one would ever locate such an entrance. In the end, Army combat engineers would level an area through the Changjin River itself to allow surviving tanks of the 31st Infantry's Tank Company to descend the river's steep banks and cross to the other side in a failed attempt to topple the structures. Several tanks actually crossed the river. Crossing the river to the structures, these same engineers determined that the structures descended downward into the ground and rested on solid bedrock. None of those present could ever recall seeing similar such structures.¹²⁹ It is not known if the tanks ever actually climbed the rising ground to where the structures stood or ever actually attempted to push them over. The provisional battalion would hold hills for nearly two days while rear elements of the Marine column, retreating south out of Hagaru-ri entered Koto-ri.¹³⁰

Once in control of the area several of the men who had ascended the mountain found that the entire area was lined by a long barbed wire or electrified fence. Most, some sixty years later could not remember whether it was simply barbed wire or electrified. If it was electrified, it was not charged while it was under their control.¹³¹ Down below some, to include a few of the soldiers, volunteered to enter the facility. The identity of the men who entered the underground facility is not known, or not remembered. None of those in either group; the one at the entrance, or those on the mountain further seemed to know who the men were. Some assumed that these men comprised a smaller, yet a third group who brought up the end of the column. Many of those interviewed thought that the men had "tagged along" on the mission to control the two hills.¹³² The men were clothed, as were most of the soldiers, in a mixture of dirty, worn, Army and Marine Corps uniform items. It appears likely that these men were the officers who had arrived at the Koto-ri on the 29th of November. Over the next two days men would drift in and out of the group holding the underground, making it ever more difficult to determine exactly who was and was not there.

The group entered the easternmost entrance to the underground. There they reported finding a long tunnel going back into the mountain. The tunnel had at least two rooms located to the right as the men entered. No one noted any electrical power lines entering the tunnel, but all admitted that they could have been there. Much like the former prisoners-of-war who suffered from starvation along the Thai-Burma Railroad during WWII and thought only of food, all of the men interviewed that fought at the Chosin Reservoir could remember was the desire to find some warm place away from the cold.

The soldiers who did go in are reported to have gone into the tunnel only as far as radio contact could be maintained with those outside. Flashlights were at a premium and in the cold of the Chosin Plateau, batteries rarely lasted more than a few minutes.¹³³ It is unknown if others within the group continued into the tunnel, but the soldiers had gone in as far as they were willing. For them to venture further into the unknown after already seeing the massacre of their fellow soldiers on the east side of the reservoir, and surviving the journey south from Hagaru to Koto-ri while protecting the left flank of the retreating Marine Corps column, was simply asking too much. They declined the opportunity for further adventure on Army pay. No one remembered taking the second hill.¹³⁴ No one recalled there being any charges or explosives left behind to destroy the tunnel as they withdrew from the aboveground area and reentered the relative safety of the perimeter surrounding Koto-ri. As they withdrew eastward across the Changjin River several female Chinese nurses exited the underground and surrendered. Where they had hid while parts of the tunnel were inspected is not known. No matter, whatever was further inside the tunnel was obviously not as welcoming

¹²⁶ Telecon interview with retired Colonel Robert Ellis Jones, US Army. 2003.

¹²⁷ *Ibid.*

¹²⁸ *Command Report: 1 thru 11 December 1950* (3rd Battalion, 31st Inf). RCT 31. 11 March 50. US National Archives, Adelphi, Maryland.

¹²⁹ Telecon interview with retired Colonel Robert Ellis Jones, US Army. 2003.

¹³⁰ *Command Report: 1 thru 11 December 1950* (3rd Battalion, 31st Inf). RCT 31. 11 March 50. US National Archives, Adelphi, Maryland.

¹³¹ *Ibid.*

¹³² *Ibid.*

¹³³ *Ibid.*

¹³⁴ Telecon interview with Blas Luis "Mike" Nazario, 2003.

as being a captive of the US Army.¹³⁵ Rumors about what was found inside the cave rapidly made the rumor mill of several thousand soldiers wandering around Koto-ri.

It was an “open secret,” as well known to the men at Koto-ri as the use of communications intercepts in tracking and assassinating Admiral Isoroku Yamamoto on Guadalcanal in April 1943. Everyone knew. Yet no one knew the details and just as quick as the rumor entered the mill, other rumors took its place and the atomic facility in the mountains near the Chosin Reservoir was quickly digested and forgotten; replaced by more important rumors – such



US military bulldozer in the Changjin River, reportedly at Koto-ri, North Korea, 1950. Geographic relationships, confirm the location of the image.

as the coming march to Hamhung, who would be in the lead, and who would be safe in the main body. For many, the range of their concern equaled the range of their rifle; the limits of their endurance. According to Philip Henshall however, the existence of the cave descended into Marine Corps legend.¹³⁶

To date, no report of the tunnel has yet to surface at the US Archives written by the US Army or the AEC; the forerunner of today’s Department of Energy. It is likely that no such report exists. Documents for the Army’s 31st RCT, created during the movement forward combat forces and their headquarters similarly do not exist. Records created by the Tenth Corps; its components consisting of the US Army 3rd and 7th Divisions, and 1st Marine Division were destroyed during the retreat from the Chosin Reservoir, Hungnam and Hamhung. For many of the US Army components, located east of the Chosin Reservoir and delayed at Koto-ri, the US Army of the time did not even know they were there. It was only in the aftermath of the withdrawal of UN forces from Hamhung that the

US Army tried to “reconstruct” those documents. So great was the Marine propaganda effort surrounding events at the Chosin Reservoir, that many of the US Army soldiers who fought there would be accused in the immediate aftermath of the withdrawal, as having never been there at all.¹³⁷

As the Marine column departing Koto-ri moved south, the Army soldiers ordered to take the area of the two hills, took their assigned place in the order-of-march south to Hamhung, and the sea. The soldiers were kept somewhat isolated from the Marines in the march under orders from their superior officers to remain together as a unit, and not venture off the road in the company of the Marines to oppose attacking Chinese.¹³⁸ It was here that many Marines would later note that the Army “doggies,” even at gun point, would refused to venture into the hills. This was the Marine’s final memories of the Army as they evacuated the area of the reservoir. Few Marines would remember that it was the “doggies” that had protected the left flank of the Marine column that retreated from Hagaru-ri, or that those same men had protected the right flank of that column on the last mile and one-half of its journey into Koto-ri. Even fewer Marines would remember that it was the “doggies” who had taken their place as the sacrificial lamb on the east side of the Chosin Reservoir on the eve of a major Chinese attack south toward Hamhung. The soldiers were under orders.

Though many of the soldiers were unaware of the predicament they faced in taking the area of the so-called cave, these men would later be used to examine other above- and below-ground facilities in the area of Hamhung in the territory still under the control of the US Army.¹³⁹ These soldiers, less than one-tenth of the number that had been at the east side of the Chosin Reservoir, could only watch from the docks as their Marine counterparts were marched through Hamhung and placed aboard ships for the outward journey to Pusan.¹⁴⁰ As the last Marines entered the perimeter surrounding Hamhung, General Douglas MacArthur arrived at Yonpo Airfield just south of the city, where

¹³⁵ Telecon interview with retired Colonel Robert Ellis Jones, US Army. 2003.

¹³⁶ Henshall, Philip. *The Nuclear Axis: Germany, Japan and the Atom Bomb Race, 1939-1945*. Stroud, Sutton. 2000.

¹³⁷ Kestner Sr, Franklin D.R. “*To the Last Man!*” *Kulbes’ Mongrels at the Chosin Reservoir: Korea, 1950*. Westernlore Press, Tucson, Arizona. 1991

¹³⁸ *Command Report: 1 thru 11 December 1950* (3rd Battalion, 31st Inf). RCT 31. 11 March 50. US National Archives, Adelphi, Maryland.

¹³⁹ *Ibid.*

¹⁴⁰ Kestner Sr, Franklin D.R. “*To the Last Man!*” *Kulbes’ Mongrels at the Chosin Reservoir: Korea, 1950*. Westernlore Press, Tucson, Arizona. 1991

he would approve Tenth Corps evacuation plans. It is not known if MacArthur visited any of the suspect facilities that dotted the area.

Over the next few weeks the men would examine a large number of, and many probably still classified facilities in the area of Hungnam and Hamhung. This included the second cave mentioned in the Snell report of 1945 where his source reported: “The observers sped across the water, back to Konan. With the advance units of the Russian Army only hours away, the final scene of this *gotterdammerung* began. The scientists and engineers smashed machines, and destroyed partially completed *genzai bakudan*.”¹⁴¹ Unlike the cave at Koto-ri, those observing the reported test had “sped across the water, back to Konan,” nowhere else.¹⁴² Some of the reports generated from their investigations were later declassified and include:

- North Korean Hungnam Laboratory (report dated 1951).¹⁴³
- Soviet Tech in Hungnam Factory (reported dated 1950).¹⁴⁴
- BW Bomb Developed Alleged Hungnam Lab (reported dated 1950).¹⁴⁵

As none of the soldiers were the investigating officer or the investigating authority, none of their names appear on or within the reports submitted.

Near the end of December 1950, the soldiers detailed to enter the various underground facilities in and around Hamhung and Hungnam embarked port aboard the USS *Consolation*, anchored just off the coast.¹⁴⁶ Possibly, because of the publicity it received at the time, many later believed they were taken aboard the more famous Danish hospital ship *Jutlandia*. Once aboard the *Consolation* the men were allowed their first real shower in over a month and allowed to change clothes into Army provided pajamas or hospital gowns. They were all given a full physical examination including chest x-rays; blood, urine and stool samples were taken.¹⁴⁷ They were held aboard the ship for five days with the same tests repeated each day and later transferred to what many believed was a US Navy destroyer, name unknown, where they were held for another thirty days at sea before disembarking once again in Korea, this time at Pusan. Though it might have been routine at the time, the examinations seemed a bit unusual for men who had received no wounds. Holding them at sea for such a long period of time suggests they had been quarantined. The analytical mind reeled.

Was the underground facility built by Noguchi or Nichitsu? Was it built at the same time as the Changjin Reservoir and the power plants along the eastern face of the Jangbaik Mountains making it innocuous? That the large amount of spoil remaining from its construction was never used to line the western riverbank of the Changjin River as was all other spoil when the aqueduct was built, suggests that this underground facility was built some years after the power plants of the Changjin Cascade and reservoir entered service in the early 1930s.

Why was the facility built in the mountains? Why was it located so far inland? Why was it built in solid rock? It was a geology well known to the Japanese who had built the aqueducts from the Chosin Reservoir to the power stations to the south and east, a geology that could support a reactor. The facility was not mentioned on the Japanese blueprints of the power plants and their supporting underground aqueduct as were the aqueduct’s access tunnels. Was the ice-covered pond the men crossed that morning actually a cooling pond?

Why was it so inconceivable to the CIA, NIC and JAEIC analysts that the Japanese had built such a facility in the mountains north of Hamhung, as Snell had related in his October 1946 article? Why was it so unbelievable that North Korea had built other such clandestine facilities in the mountains of their own country, before assisting Syria in building a clandestine reactor in their desert – one that was bombed by Israel? The questions continued.

Had the Soviet Union actually benefited from whatever atomic research facilitates the Japanese had built in Korea in the area of Hamhung during the post-WWII era? Did these facilities actually support the Soviet effort to build a bomb? Did the Soviet Union rely upon these facilities to any great degree? Would the Soviets invest more scarce funds into a line of research, the Japanese program that might, or might not work, when they had a working model within their grasp? It would seem that they did not as they already had the plans, blueprints, formulas and such for a working atomic bomb – ours. They had gotten the information required to build the weapon through their WWII-era spy networks consisting of Julius and Ethel Rosenberg, Klaus Fuchs, David Greenglass and others. The first Soviet weapons test was actually the first test of the American developed Fat Man bomb used at Nagasaki at the end of WWII. The Soviets had tested a “bomb,” the US had tested a “device” at Trinity.

¹⁴¹ Snell, David. *Japan Developed Atom Bomb; Russia Grabbed Scientists*. Constitution. Atlanta, Georgia. 3 Oct 1946.

¹⁴² *Ibid.*

¹⁴³ Record Group 319: Records of the Army Staff, National Archives. Adelphi Maryland.

¹⁴⁴ *Ibid.*

¹⁴⁵ *Ibid.*

¹⁴⁶ Simmons, Edwin H. Brigadier General. *Frozen Chosin, U.S. Marines at the Changjin Reservoir*. Marines in the Korean War Commemorative Series. Washington Navy Yard. Washington D.C. 2002

¹⁴⁷ Telecon interview with retired Colonel Robert Ellis Jones, US Army. 2003.

Was the ice covered pond connected to the power system's underground aqueduct? Mapping imagery taken during the 1960s and available at the US National Archives revealed the installation of piping between the Changjin River and the underground facility. The former Japanese-constructed pond, viewable on Google Earth, had also been enlarged at some point after the Korean War. Was the pond part of some heat transfer system necessary for some industrial process located within the underground facility? If so, what was that process? What were the large rectangular concrete structures? Why did the Army engineers believe they extended all the way down the mountain into solid bedrock? What made the engineers so sure that the tanks could not push them over? What possible purpose did they serve?

Did the underground facility innocently support some kind of pumping arrangement for the flow of water to the power stations? Was this actually the cave where the Japanese had assembled some kind of weapon reported to have been tested off the coast of Hamhung in August 1945? It appeared to meet all the requirements derived from the few reports of location given by Snell and Henshall. Had the Marines originally captured the facility and reported its existence? If they had, why had they not continued to occupy the area once it was under their control? Why had US Army soldiers been sent to occupy an area already under Marine Corps control?

Why had the Marines, shock troops, been sent into the mountains of North Korea in the first place? The ROKA and US Army had already occupied the major North Korean centers of population in that area, the time for the use of shock troops had long since passed. The reservoir itself was unimportant; just a large lake created by a dam. The most costly part of the power system rested with its power plants; they lay below the Funchilin Pass and were already under Allied control. They had never been dismantled by the North Koreans or the Chinese. Why not stop the US advance there? The reservoir was a dead end. The Marines would find that travel from the reservoir to Kanggye, China or the Soviet Union was nearly impossible. When was the last time in American military history that US troops had attacked into nowhere to capture a water reservoir that was not used as a source of drinking water?

Why was Technical Sergeant Carl Hanson, US Marine Corps, the "battalion's 1st atomic warfare specialist," at Koto-ri?¹⁴⁸ Why have a "rear-echelon pogue" at a firefight? Why had Marine Corps Major General O.P. Smith tortuously delayed the Marine advance into the area of the Chosin Reservoir *only* after he had reached Koto-ri? Why all the foot dragging? Could the facility be some unknown North Korean reactor? A reactor that had been built during the war by the Japanese? It met many of the requirements. Could it have been some type of Japanese uranium enrichment process? Installed during WWII? Some North Korean light industry? Perhaps some WWII-era Japanese munitions plant of some kind? Occam's razor, the simplest explanation probably being the best, had been denied by the US intelligence community.

Why did China actually enter the Korean War, attacking the area of the Chosin Reservoir where this facility was located and Unsan; a gold mining area suspected of holding uranium in its sludge ponds where waste gold mining byproducts were sent for storage? Why was Mao Anying, the son of China's leader Mao Zedong at this mine when he was killed by an American air strike on 25 November 1950? In entering the Korean War, were the communist Chinese attempting to recoup in Korea, the Japanese science it had lost during the Chinese Civil War? Though the Chinese were at that time, relying on Soviet assistance in developing their own weapons program that assistance had been slow in coming, and would ultimately be withdrawn altogether in 1959. China would explode its first weapon five years later, in 1964. The questions continued to mount.

Was Lieutenant Colonel Berry K. Anderson ever really involved? Had he indeed led a small group of officers north out of Hamhung on 27 November to Koto-ri? Who were these men? Were they actually civilian scientists in military uniforms, as were the *Alsos* teams that entered Italy and Germany in the last days of WWII in Europe? Were they simply Army officers trying to join up with US Army forces on the east side of the Chosin Reservoir? Why had a Lieutenant Colonel, and not some sergeant familiar with the area, been detailed to guide these men to Koto-ri? What had they been doing in Hamhung before they set out for Koto-ri? When did they arrive in the area of Hamhung? Where did they go in Hamhung? What did they see? What, in November of 1950 after the fall of Hamhung, had so panicked General of the Army Douglas MacArthur? Was it simply the entry of China into the Korea War? MacArthur wore one Medal of Honor, seven Silver Stars, had fought with valor in WWI; early in WWII he saw his forces in the Philippines collapse under the weight of the 1942 Japanese attack and yet in all of these events, he had never totally panicked. Why now? What was so different about the events of November 1950?

Why had President Truman discussed the possible use of the atomic bomb against China with the press on the day the possible US Army investigating team was approaching Koto-ri? Why was Truman contemplating granting MacArthur the "selective release (SEL REL)" of nuclear weapons?¹⁴⁹ What would have MacArthur released these

¹⁴⁸ Hammel, Eric. *Chosin: Heroic Ordeal of the Korean War*. Presidio. Novato, CA 1981

¹⁴⁹ General Thomas T. Handy to General Carl Spaatz, July 26, 1945, Top Secret. Source: RG 77, MED Records, Top Secret Documents, Files no. 5b and 5c. <http://nsarchive.gwu.edu/NSAEBB/NSAEBB162/>

weapons against? Was there some specific “target engagement zone (TEZ),” of troops massed in the field that would have presented itself as a suitable target for an atomic bomb? Again, more questions with few answers.

Why had MacArthur gone to Yongpo Airfield on 11 December, only days before the city of Hamhung was abandoned? Did he examine any of the former Japanese special warfare laboratories located in that city? Why had he gone to Sinanju on 24 November? Why, after he departed Sinanju had he so recklessly ordered the aircraft carrying him to overfly the Yalu River, without a fighter escort? Was there even more special facilities in the mountains of North Korea than we knew? Perhaps some other Japanese built nuclear weapons materials production center north of American lines, still out of reach? What did he hope to see out there? Why had Truman later removed MacArthur? Why, before his death, was there talk of relieving General Walton Walker? Why was Walker’s death, so similar to the death of his mentor, George Patton? Was Truman subsequently cleaning up his own mistakes? At what point does an American president decide that lying for the good of America, is good for America. Can that authority be delegated to US government bureaucrats? Why had the soldiers of the decimated 31st RCT – Provisional, already worn, been ordered by Anderson to occupy that area west of Koto-ri and hold it for nearly two days? Why had the issue of the cave, by the morning of 7 December, become solely an Army problem? A problem for investigators possibly associated with the US wartime Manhattan Project?

Had the AEC and the Army indeed, despite their earlier denial of interest in possible Japanese built atomic research facilities now supporting the Soviet Union’s atomic bomb program, sent an investigating team into North Korea much like it had into Germany at the end of WWII? It appeared so.

What was in the UGF? Who knew? Who had built the log fortifications that the US Army and their Marine brethren had to overcome in withdrawing from Hagaru-ri? Though it does not take a tremendous amount of work to fell a number of trees and build a log wall, as they occupied the area and fought US force, did the Chinese in the area really have the time to build a log bunker in which the Marines would later find cooked and warm rice? Those interviewed seemed to have no answer. No one had ever asked the question before now. No one remembered if the trees forming these bunkers were freshly cut or much older. Had these bunkers formed a previous Japanese designed defense of the area? Did these bunkers tie into some Japanese line of resistance against possible advancing Soviet Red Army in the area of Hamhung as late as November 1945, three months after Japan’s surrender in August 1945 which resulted in the largest set-piece battle during WWII between the USSR and Japan?¹⁵⁰ What were they there to protect? Who, but the Japanese that were there, could ever really say? What was in the cave at Koto-ri at the time of the Korean War?

Perhaps it was some additional power generating system that generated additional power from the flow of water southward as it moved along the underground aqueduct to the dominant power stations located further south and east. Perhaps it was no more than some Japanese wartime relocation site built in the mountains of Korea before the end of WWII.

Japanese-educated Yi Sung Ki, a Korean scientist who defected to North Korea during its earlier occupation of Seoul in 1950, is reported to have lived in such a cave located in that same province during the Korean War. That cave was reported to have “included such facilities as sleeping quarters, a dining room, and bath, and recreation room. Despite wartime conditions, the cave was supplied with the equipment and reagents necessary for research.”¹⁵¹ All of these alternatives were considered but could not be entirely proven nor disproven. We could never determine the validity of any of any of the proposed competing hypotheses and they remained possible, unlikely, but nonetheless possible. We were never able to determine the answer to our own questions.

As the next year droned on, our previous entanglements with WINPAC, NIC and the JAEIC continued. We never wrote a full report about the wartime Japanese atomic weapons program. Working 40 or more hours per week, commuting one hour each way to work every day, there just wasn’t time. Our lives at work had become a near constant road trip of briefings, meetings and by now, what had become the daily search for continuing funds to support the work. No one pays for continuous research without an equally continuous outflow of results, and so it was with our project. The constant call to give briefings and attend meetings, was nothing more than another way to sandbag our efforts. Research was time consuming, as was preparing briefings and attending meetings. Our attendance at numerous meetings was the CIA, NIC and JAIEC way of deflecting us from our research. The quality of the supporting IC databases remained a constant and nagging question. Only one example is required.

In the last year of our work in discussing the North Korean uranium enrichment program with one of DIA’s nuclear analyst, a well-endowed former Congressional aide, we mentioned to her the need for a complete mapping of the North Korea’s distribution-level electrical power grid. In response she simply shrugged her shoulders and, starry-eyed, replied that “if she needed that she would simply go to the Energy Branch and ask the analyst in charge of North Korea – they have all that.” It seems not to have registered with her that for five of the last seven years, I had been

¹⁵⁰ Thompson, Robert Smith. *Empires on the Pacific: World War II and the Struggle for Mastery of Asia*. Basic Books. 2001.

¹⁵¹ *DPRK Scientist Yi Sung-ki Profiled*. Tojyo Gendai Chosen no Kagakushatachi. 18 February 1997

that analyst, or that DIA's SOP resisted analyst efforts to map anything less-than strategic targets (the longest bridges, the largest industries, the largest manufacturers of was supporting materials), just as it did during WWII and none of which directly supported a country's efforts to develop chemical, biological, nuclear or missile weapons. The CIA, NIC and JAEIC, the IC went to incredible lengths to discredit our work. Their tactics being fallacious arguments, included:

- Meaningless Questions
- Argument by Prestigious Jargon
- Equivocation
- Error of Fact
- Argument from Personal Astonishment
- Ambiguous Assertion
- Outdated Information
- Least Plausible Hypothesis
- Moving the Goalposts (Raising the Bar, Argument by Demanding Impossible Perfection)
- Appeal to Complexity
- Disproof by Fallacy

Years later several examples remained glued my mind.

Our final meeting with members of the NIC was held at Langley. We were no longer welcome in the main briefing room, and about sixty people were assembled in a standing room only meeting on an upper floor of the older, main building of the CIA. We were asked by the secretary mentioned earlier to allow the other analysts assembled to give their briefings first, and hold our questions for later. Sandbagged once again, we sat there as briefer after briefer rose

to naysay our work.



Image of L-Company, 3rd Battalion, 31st Infantry Regiment soldier taken on the north side of the perimeter surrounding Koto-ri in early December 1950. Note the buildings atop the spoil pile on the opposite side of the Changjin River.

In an effort discredit one of the sentences in our paper where we discussed a shipment of a special lubricating oil in a crate to a suspect location overseas, we were confronted by a former US Army Lieutenant Colonel who briefed that those oils were normally held in one-gallon plastic containers and not shipped in a crate. I was again speechless as the former officer had certainly been stationed at different locations worldwide, and seen his own personal household goods packed into boxes, then into crates and finally shipping containers for movement aboard ship. How did he think these plastic gallon jugs were shipped around the world? At the foot of the captains bed in some stateroom aboard some tramp steamer? Another briefer followed with yet another brief that lacked logic.

In the briefing she presented several slides showing low-level electrical power lines entering small underground facilities worldwide. One of these underground facilities was referred to as the

“Bat Cave” as its doors folded open to allow the entrance of entire locomotives into the underground facility. In her brief, she argued that the same physics that allowed low-level electrical power to move underground, applied to the high level power that entered the underground facility at Koto-ri. Physics alone refuted her argument. That all the underground facilities she showed in her slide presentation only had access to extremely low-level power of 1- to 3-kV and could not support a uranium enrichment facility meant nothing to her or her audience, her brief was allowed to stand. Yet another briefer argued that, as the film we were using possessed errors here and there, blemishes across the frame, the quality of the entire image was therefore questionable. One attendee, an earlier friend, left the room after translating a language issue, most likely ashamed of the way we were treated. After the meeting I never spoke with him again. He would die several years later and I believe our treatment at the hands of the NIC, the trial we faced, had worn on him.

The picture posted to the above left, caused particular issues for the NIC and serves as one of the few images taken in the area of the underground facility that could not be so easily refuted. The image shows a member of L-Company,

3rd Battalion; 31st Infantry Regiment soldier taken on the north side of the Marine Corps perimeter surrounding Kotori in early December 1950. The image is one of the few handheld pictures taken at the time that reveals the aboveground area surrounding the underground facility. The large spoil pile along the far bank of the Changjin River that Major Robert E. Jones and his soldiers had scaled that morning of 7 December 1950 and the buildings reported to have been there are clearly visible in the background. The image's point of view had been determined, the image scanned softcopy, and overlaid to computer terrain models of the suspected area where the image had been taken. It was 100 percent accurate. Contracting geographic information specialists (GIS) then supporting the National Imagery and Mapping Agency (NIMA) later told me that "they had been ordered to find any other place in Korea where the terrain matched" to refute the evidence. The geography contained in any picture is unique to that location. Despite the futility of the orders given, they worked the project anyway. It is an old maxim that goes along with contracting to the government, "If you badly want it done, you'll get it done badly." Only years later would I learn the lengths the government had gone to discredit my work.

The meeting droned on. I, and the two Air Force officers attending the meeting simply ignored the proceedings. One of the officers sat at the table turning his pencil end-over end. He sat there like that for nearly two entire hours. I myself sat there wishing I had taken a book to read as the meeting was a gross waste of valuable time. To his great credit Eric was the only person amongst our group who would vehemently oppose the proceedings. I and the two officers had long-since realized that the truth did not matter against the continued funding of massive technical collections programs. No two colonels and two contractors could withstand the bureaucratic inertia of the IC. There were simply too many of them, too few of us. We had overturned a standing NIE, confronted the established order, and solved major issues related to locating clandestine nuclear weapons materials production facilities; if we were allowed to continue our work, these programs could lose the tax payer funds required to continue pet projects that produced nothing! As the time scheduled for the meeting quickly ran out, we of course, were not allowed to ask any questions.

We had been hung before the trial; now the crowd gathered below was arguing over our robes, the court was in session simply to validate the act. The DNI had only recently organized an office for ethical intelligence and one of its members attended the meeting, oblivious as to why she was there. As she had not been involved in any of the prior meetings, her presence was required to give additional leverage in refuting the findings of our research. That the DNI had decided that an ombudsman was necessary, was telling. Yet we were in good company as many of those who had appeared before the NIC and JAIEC over the years, whose research and ideas were downplayed and repudiated, were later proven to be correct.

Only one of the many people we briefed over the years ever came to examine the materials we had gathered. He left convinced that we were correct in attributing at some of North Korea's present-day nuclear weapons program to the Japanese effort of WWII. But the truth did not matter.

With the revelation of North Korea that it was pursuing a uranium enrichment program in late 2003 and the admissions of Pakistan's A.Q. Khan that he had transferred uranium centrifuge technologies to Pyongyang, the US government increased pressure on its IC to locate such facilities, but never demanded an answer. Any possibility that the North might be using older technologies, such as EMIS or gaseous diffusion as our research had revealed, was not relevant: the IC was now only interested in centrifuges. Centrifuges were now "the flavor of the day." That centrifuges worked best when fed some precursor that these older technologies could provide was completely ignored. What did the IC believe that North Korea was doing throughout the late 1980s into the year 2000? What was North Korea's supposed economic collapse of 1990 really all about?

In watching the events surrounding the collapse of the Soviet Union and the fall of the Berlin Wall, most IC analysts believed that North Korea's electrical power system – old and antiquated – had simply collapsed, forcing the country's heavy industries into failure and destroying the country's economy. Like much of the IC's analysis of North Korea's uranium enrichment infrastructure however, that line-of-reasoning could not withstand intense review. What the IC failed to understand was more complex: Kim Il Sung had wanted the atomic bomb since 15 August 1945 and would be ruthless in his pursuit of the weapon.

Kim Il Sung had been born in Pyongyang early in the Japanese occupation and grew up under the split-toed shoe of the occupying Japanese. He had matured to a young man during the Japanese Occupation of Korea (1905-1945) where he found himself a second-class citizen in his own country. As a young man he publicly railed against the Japanese. In 1929 Japanese police learned of his activities and Kim was jailed. Unlike Mahatma Gandhi who adopted nonviolent civil disobedience as a means of resistance to British rule over India, Kim instead turned to violence and eventually took up arms to force the Japanese out of Korea. Kim Il Sung became consumed with forcing the Japanese out of Korea.

In 1931 Kim joined the Communist Party of China – the Communist Party of Korea (CPK) had been founded in 1925, but the CPK had been thrown out of the Soviet-sponsored Communist International, the Comintern, in the early

1930s, for being too nationalistic. Kim later joined various anti-Japanese guerrilla groups in northern China and eventually wound up in the Soviet Union, where he rose to the ranks of Major in the Soviet Red Army, eventually returning to Korea to rule what would become North Korea. Kim's desire for an atomic bomb grew out of the events at Hiroshima and Nagasaki, Japan that ended WWII on 15 August 1945. To Kim, it was not the Soviet Red Army, not US forces battling across the Pacific but the atomic bomb that ended Japanese rule over the Korean Peninsula,

To Kim Il Sung, mighty Japan, the overbearing Japanese, had been toppled from their pedestal atop Asia and destroyed, not by the US; but by the atomic bomb. Anyone who possessed that power was capable of defending a united Korea against its more powerful neighbors Russia, China and the offshore power of Japan, now an American puppet. It was the idea of a unified Korea, eventually nuclear-armed, that led to Kim's ill-fated attempt to unify the peninsula under his rule in 1950. What Kim Il Sung learned from the Korean War was not that America could defeat the North Korean Army, but that an independent Korea could not stand alone against the greater powers that surrounded it, unified or not, without an atomic bomb. The Korean War only reinforced Kim's earlier understanding of Korea's position vis-à-vis its more powerful neighbors.

In the aftermath of the Korean War Kim Il Sung quickly rid North Korea of any home-grown Korean communist who might oppose him. He later rid the country of its Soviet and communist Chinese advisers who had sidelined him during the Korean War.¹⁵² Those North Koreans who favored a Soviet- or Chinese-styled communism were also purged – executed, sent into exile or internal concentration camps. North Korea's future would not be decided by agreement or consensus, but by the decisions of only one man; Kim Il Sung – and he was bent on acquiring atomic weapons no matter the costs.

In the years immediately after the Korean War, China, the USSR and the East Bloc would grant North Korea foreign aid. East Germany would plan and rebuild the North Korean city of Hamhung. Czechoslovakia would provide aid in rebuilding and electrifying North Korea's war-torn rail roads; the Czechs also built underground munitions factories.¹⁵³ Moscow would provide additional financial aid and assistance, as would China. In Kim's mind all of this would eventually be channeled into the acquisition of a nuclear weapons capability. Power stations? Were rebuilt to support this eventual program. East German aid in building a new concrete plant? Well, concrete was needed in building reactors and uranium enrichment facilities. Everything achieved by the post-Korean War Stalinist state was suborned to Kim's ultimate goal, that of acquiring an atomic bomb.

During the Cold War Kim Il Sung was often seen as waffling between an alliance with China, or an alliance with the Soviet Union. Throughout the Cold War he had an on again, off again relationship with the various countries that formed the East Bloc and the Warsaw Pact. High- or low-tide, North Korean relationships with these countries were always peppered with questions about advanced technologies leading to, or assistance in, acquiring a nuclear weapon.¹⁵⁴ Kim asked the Soviet Union for assistance in acquiring nuclear weapons; North Korean scientists studied at Russia's Joint Institute for Nuclear Research in Dubna, his diplomats pressed the issue with Hungary, East Germany, Poland and Yugoslavia.

Despite the public need for the appearance of worldwide communist solidarity, privately Kim Il Sung always wanted the bomb. Few people in world history have been as enamored with an issue as to put aside all other earthly concerns in achieving their goal as was North Korea's Kim Il Sung. Lenin, Hitler, Stalin, Mao and Cambodia's Pol Pot come to mind, but even among those, some faltered along the way. Note Lenin and his post-Bolshevik revolution and his flirtation with a relaxation of rules against capitalism as a method of stabilizing Soviet Russia. Rumored throughout the 1980s to be allied with Pakistan's Zulfikar Ali Bhutto, North Korea was – first and foremost – always after the bomb.

Tied to Iraq's Saddam Hussein, North Korea kept sight of the goal. Allied with Burma in the 1990s through the earliest decade of the 21st Century, North Korea kept its eyes on the prize. Allied with Syria and Iran, North Korea is pursuing the bomb. Rumors that North Korea was the recipient of technologies leading to Iraq's potential acquisition of a nuclear weapons, are likely to be false. The truer story is probably that Iraq was the beneficiary of North Korean knowledge of those processes – as is Iran and probably Myanmar (Burma). As a “nuclear pariah,” it is in North Korea's best interests to ensure that the eyes of US presidents are distracted to as many potential centers of power as possible while Pyongyang builds up its inventory of uranium-based weapons.

Though the world's other nuclear powers; China, the former USSR, Britain, France and India would all come to understand and recognize the great responsibility in acquiring and, most importantly maintaining, their nuclear forces as deployed and stockpiled; North Korea was unlikely to ever understand those responsibilities and costs.

¹⁵² Spurr, Russell. *Enter the Dragon: China's Undeclared War Against the U.S. in Korea, 1950-51*. Newmarket Press, New York. 1988

¹⁵³ Becker, Jasper. *Rogue Regime. Kim Jong il and the Looming Threat of North Korea*. Oxford University Press. 2005.

¹⁵⁴ Szalontai, Balazs and Sergey Radchenko. *North Korea's Efforts to Acquire Nuclear Technology and Nuclear Weapons: Evidence from Russian and Hungarian Archives*. By August 2006. https://www.wilsoncenter.org/sites/default/files/WP53_web_final1.pdf

Independence and isolation in some remote corner of the world, where the interests of great powers collided and left Korea subjugated was all that was and currently is important to Kim Il Sung and his grandson Kim Jong Un, and is what lay at the center of North Korea's economic and industrial collapse of 1990.

After the fall of the Berlin Wall and the collapse of the Soviet Union, North Korea's former patrons now demanded cash for their hard strapped economies – cash that Pyongyang did not have. North Korea could no longer barter poorly made pots and pans for advanced military gear and technologies. The country's industries had collapsed (were actually shutdown) long before North Korea's electrical power system collapsed. Even with minimal maintenance, it was impossible for the collapse of North Korea's electrical power system to lead the country's industrial collapse. Few power systems have ever abruptly collapsed, and even then they were back on-line within hours or days. What North Korea experienced was instead, a “scheduled brownout,” as North Korea diverted all its electrical power resources into WWII-era-type uranium enrichment plants and chose not to feed its starving masses or runs its outdated industries. If, as Zulfikar Ali Bhutto, the 9th Prime Minister of Pakistan from 1973 to 1977 had said that Pakistanis will “eat grass but build the bomb,” then North Koreans could eat sawdust, tree bark, and even each other if that is what it took – and in the end, they did.^{155,156} Once the US intelligence community had analyzed itself into believing that North Korea had suffered and economic collapse due to its failing power system, all Pyongyang had to do was managed perceptions.

In the eyes of North Korea's Kim Il Sung, as US authorities had said since the end of WWII, the ability of any nation to possess an atomic bomb was never more than a matter of dedicating all its resources toward achieving that goal, and that is exactly what Pyongyang did. That was the purpose of North Korea's Arduous March through the 1990s. That was why the lights had gone out in North Korea's showcase capital of Pyongyang in the early 1990s. Whether the Berlin Wall fell, or communism collapsed, did not matter to Kim Il Sung; North Koreans would have suffered the same. That it took the lives of 200,000 or two million people; was simply part of the costs as North Korea calculated in acquiring the weapon. Every North Korean knew that. It was a small price to pay for Korean independence. North Korea had probably produced its first uranium-based weapon as early as 1992. Plutonium-based weapons would follow. Kim died a happy man in July 1994 knowing that he had achieved his goal, and that North Korea now had the bomb.

North Korea never lacked for electrical power to support its industries and feed its people, it had instead dedicated its electrical power system to support its political goal of acquiring a nuclear weapon.

In the aftermath of the Korean War and the rebuilding of the country, Pyongyang developed local industries to a point where the nation could support the Japanese-installed power systems of the occupation-era, plus the construction of all future electrical power systems the country might pursue in the northern part of the Korean Peninsula. By the late-1950s all subsequent Soviet- and East Bloc-supplied electrical power equipment was stored in warehouses and underground facilities to support future operations, such as the national effort to enrich uranium. The IC had once again been snookered by its inability to see, like that marine or soldier during the Korean War who only saw past the end of his rifle, past the end of its own selfish needs. The IC only saw what it wanted to see as it “mirror imaged” its own interests onto North Korea. Surely the North had a dire energy crisis; surely the North had suffered an industrial and economic collapse; surely the North could not feed its starving masses; surely. For North Korea, the appearance of poverty was the price to be paid in seeking western food and energy aid, all the while building a nuclear weapon. The US intelligence community could not be that stupid; or could it? In 2016, as North Korea tested yet another nuclear weapon, the answer to that question was obvious. Yes, the US intelligence community was indeed, that stupid. Inside the various underground facilities where North Korean enriched the uranium necessary as early as 1990 to build its first atomic bomb several years later, the lights were on. In Washington DC however, the wheel was still turning, but the squirrel had long since died.

The IC bureaucracy was simply incapable of identifying such locations; it was lethargic, incompetent and corrupt. The community had built multiple upon multiple layers of management, such as the NIC and JAEIC, and the National Security Council (NSC) to keep information within the community and prevent that information from reaching the country's leaders, and succeeded. The locating of a North Korean centrifuge facility would wait until it was privately revealed to Siegfried Hecker, co-director of the Stanford University Center for International Security and Cooperation, by North Korea at their Yongbyon Nuclear Scientific Research Center in November of 2010. With that revelation, what did the IC believe North Korea used as a precursor to feed its centrifuges? Thin air? Where did that precursor, Hex or UF₆ originate? What process was used to create the precursor? When the North Koreans admitted they had a uranium enrichment program in October 2002, it is likely they had already been producing enriched uranium for over

¹⁵⁵ *Is N Korea's famine causing people to eat their children? Reports of murder and cannibalism coming out of rogue state are deemed 'credible.* The Week. 28 January 2013. <http://www.theweek.co.uk/world-news/north-korea/51230/n-koreas-famine-causing-people-eat-their-children>

¹⁵⁶ Demick, Barbara. *The unpalatable appetites of Kim Jong-il. While his people are left to subsist on boiled grass and ground tree bark, North Korea's leader Kim Jong-il indulges shamelessly in only the world's finest food and wines.* 08 Oct 2011. <http://www.telegraph.co.uk/news/worldnews/asia/northkorea/8809102/The-unpalatable-appetites-of-Kim-Jong-il.html>

14 years! What kind of dope did the IC smoke in its hidden chambers behind the Green Door of government, where it keeps secrets from public examination and discussion? Who would ever be held accountable? The answer was, no one.

Confronted by the information and clandestine facilities that we had revealed, the government simply added more wagons to the circle created by Kelly in 1946. It added more layers of lies to the previous layer established in 1946, in defense of the bureaucratic nonsense that Kelly, and the SCAP, had created.

As our work had become more controversial or well-known, we were under constant pressure to locate something new, something more exciting, a new monkey each week. Burma, Iran, North Korea, Pakistan – it did not matter as the targets were out there waiting to be found, or previously located and misidentified by the IC's inept analytical processes. To the IC the answer to its analytic ineptitude was more investment in technologies that most analysts could not use, and the collection of more information that its analysts did not have time to examine.

The aforementioned member of the PFIAB had taken a copy of our briefing to the CIA's Kent Center for Intelligence Analysis whose staff agreed that our methods were valid and the investigation worthwhile. Members of the JASONS, an independent group of scientists who advise the United States government on matters of science and technology, had examined, commended our work and recommended that DIA accept its methodologies. DIA promptly agreed, and just as promptly shelved the project and its conclusion.

In the aftermath of 9-11, and the failure of the IC to reveal Iraq's nuclear weapons-of-mass destruction to the public, analysis was depreciated to a point where analysts reported the facts in encyclopedic fashion, drew no conclusions, and offered policy-makers no viable options for dealing with the challenges that faced the nation. Briefings were now prefaced with terms such as; "we know," "we suspect," "we don't know," and "we believe," with no one revealing the entire story. Analysis of North Korea's KN-08, a road-mobile intercontinental ballistic missile serves as a good example of how far the IC's analytic arm has failed. The IC *knows* that North Korea has the missile, it *knows* that the missile can reach the US, it *knows* that Pyongyang has tested a nuclear weapon of some type, but it *does not know* if the country has mated that weapon to the rocket. If North Korea does not have a viable warhead, then why did they build the missile? There should be little doubt however that Japan's wartime facilities formed the foundation for North Korea's later, successful acquisition of a uranium-based weapon.

North Korea's plutonium-based weapons program of course, grew from their experience with uranium. While their plutonium weapons tests so far appear to be failures; they are obviously learning and continue investing in that effort. Why start doing the actual work required to locate clandestine nuclear weapons programs and telling the truth now?

For bureaucrats to make progress in solving a problem, means losing access to more tax dollars to support the efforts the programs they are assigned, and the contractors upon which they depend. The work that Eric and I did struck fear across the bureaucracy, but those that had directed our investigation, had also used us to pursue addition funds to support the creation of additional collection platforms, few of which would ever be used by IC analysts. That is the way that the management of Scientific and Technical Intelligence (S&TI) works: promised solutions costing ever greater amounts of taxpayer dollars, with few elected officials ever inquiring about delivered results.

The S&TI business plan had taken shape with the U-2 in the 1950s, and grew into the satellite collections programs of today. The claims of the national intelligence community that S&TI could answer all questions, produce more accurate results, is what led former Admiral Stansfield Turner, the Director of Central Intelligence (DCI) under President Jimmy Carter, to disastrously eliminate most of CIA's human intelligence (HUMINT) analysts and in-place assets (spies), in the late 1970s. Turner's initiatives to reform and simplify the intelligence community's multilayered secrecy system produced few results and left the US unprepared when Islamic radicals took over Iran in 1979.

Turner's misguided efforts led to the creation of additional layers of bureaucracy to misdirect and protect the IC such as the NIC. Eisenhower had warned Americans of the "military-industrial complex" in his 1961 farewell address, but I doubt that even Ike had foreseen the low levels of competence to which the IC would willingly succumb. Where once business had funded the US government, it is now the government that funds business by passing money from the government purse to business, in an effort to improve collection systems that have not improved greatly in quality since WWII. While North Korea builds bombs, Japan and the Japanese are held hostage. That stable platform from which most American bombers and many fighters took flight to fly over North Korea during the Korean War, will be unable to perform that same role today, when faced with a nuclear-armed Pyongyang some 60 years later. Considering that it was Japanese facilities located on the Korean Peninsula and left there intact after WWII that gave North Korea its step-up into the big leagues, surely the chickens have come home to roost – but to Japan! As for the IC....

Facilities that had been previously identified and accepted within the IC as valid targets, were now open to question. As there was never any quality control of the databases, the targets contained within these databases could not withstand close scrutiny or examination.

This lack of quality directly impacts the nation's Target Data Inventory (TDI) from which is drawn the National Target Base (NTB) which was used to develop target sets for the Single Integrated Operations Plan (SIOP), the United

States general plan for nuclear war from 1961 to 2003. Though the SIOP was replaced by Operations Plan (OPLAN) 8044, and subsequently OPLAN 8010, *Strategic Deterrence and Global Strike* in December 2008 the lack of quality in supporting databases continues on.

It is doubtful that even under General Curtis LeMay any of the Strategic Air Command's (SAC) preselected targets for its missile and bomber force under the SIOP were ever properly supported and justified by the IC's databases, or that USSTRATCOM's current set of targets rely on any more substantial data. For the nation's intelligence community it was garbage in, garbage out; yet the nation's security rested on that garbage out, and that was the misdirection of US assets against targets that did not exist or Desired Ground Zeroes (DGZs) that were improperly placed based upon bad data. As the US moved from larger, ever more destructive weapons measured in megatons and targeted to destroy more of the enemy's infrastructure in one blast, to smaller, more precise weapons measured in kilotons that were targeted to destroy precise facilities and encompassing whenever possible additional infrastructure; the quality of the data used to produce those targets sets continued to deteriorate and the ability of the nation to defeat its enemies during a nuclear war, declined. The IC plods along.

Just as Kelly did when confronted with the Snell article in mid-October 1946, when the bureaucracy is challenged they circle the wagons and protect their own. The result was simply more dead horses, more burnt wagons, and ultimately less trust in the government. Our methods however, withstood attempts to discredit them.

Though we had gathered a tremendous amount of information on the wartime Japanese atomic energy and weapons research program, that information remained incomplete. There were many unanswered questions. Over the next decade I would drag a diabetic body, worn by an allergic reaction to medications designed to control blood sugar levels, to the US National Archives in Adelphi, Maryland in an attempt to complete that information. While I gathered more and more information, archival research was mostly a hit and miss operation. Great questions remained.

So what had really happened during those early days of the Korean War near Koto-ri? Who knows?

From what I was able to gather, I believe that at some point after the ROKA revealed that it had found an intact uranium enrichment facility as it approached or entered Hamhung in October 1950, that the AEC, US Army or perhaps SCAP had indeed sent into North Korea some team to investigate that facility and others. Some of the locations investigated were probably former Japanese biological and chemical warfare facilities. But some were evidently related to the Japan's wartime atomic bomb research program. Exactly what these facilities were, remains an open question.

It appears likely that the team arrived at Hamhung after the US Army relieved ROKA forces of their responsibility for the area in early November 1950. From the history of SCAP interest and re-interest in the WWII-era Japanese atomic research program over the years following WWII; the Furman, *The Compton Report*, USNAVTECH and Fisher investigations of 1945 and 1946 respectively; the Kelly inquiry following the 1946 release of the Snell article and additional investigations into 1948 and 1949 that something had gone terribly wrong with the earlier inquiries, and that much about that program remained unknown. It appears likely that in the lead-up to the Korean War that SCAP was at the least, concerned about their lack of actual information as to the success or failure of the Japanese atomic research program. It was with those worries that SCAP entered war on the Korean Peninsula and events at the Chosin Reservoir subsequently unfolded. Their concerns were probably valid.

Once in control of the Hamhung area, expanding outward and locating additional evidence in support of its investigations, that team probably reported some unsettling information back to SCAP headquarters in Tokyo, Japan, if not Washington DC. It is likely that the US Marines had indeed discovered something in the area of the Chosin Reservoir on or around 14 November as they advanced northward to the Chosin Reservoir. The foot dragging of Marine Corps Major General O.P. Smith might have been well-advised. The Army team, probably civilian scientists in uniform now located in Hamhung was probably ordered to proceed to Koto-ri to confirm and investigate what Marine Corps commanders in the area had reported back to Tenth Corps, if not Tokyo, if not Washington DC.

Now in control of the aboveground area surrounding Koto-ri it is likely that, knowing that the Chinese had entered the war, the Marines continued their advance north leaving the underground facility to be investigated by the US Army and possibly men connected to the former Manhattan Project. That probably explains why Lieutenant Colonel Berry Anderson formed a patrol solely from survivors of the original 31st RCT to explore and control the area of the underground facility – it was not a Marine Corps problem – the Marines were fighting the Chinese; that was a Marine Corps problem.

As for whatever might have been in the underground facility, it was probably located so far down the tunnel as to make its complete investigation and destruction either unlikely or possibly downright dangerous, as the eventual exit of the two female Chinese nurses later revealed. It is likely that due to the amount of overburden provided by the mountain underneath which it lay, that future air strikes against the facility were unlikely to result in significantly impacting the structure. If there had ever been a report written about the facility, it was probably filed away in some

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file cabinet in Tokyo, Japan or Washington DC and as the Cold War continued into the Cuban Missile Crisis and the subsequent war in Vietnam, eventually forgotten.

In the aftermath of the Korean War, it is accepted history that with that war, the US drew a line against the expansion of communism in Asia, but knowing of Japan's former research facilities in Korea and elsewhere, one has to question just who drew what line? The real secret is not that Japan's wartime atomic chickens had come back to roost now threatening Tokyo with imminent destruction but just how stupid the US intelligence community could really be. Anyone that argues that they are going to "fix intelligence" should be viewed with a heavy eye toward skepticism, as they probably have a palm laid out to be greased by contracts from that same community to provide answers that are unwanted and will go unheard. There is just too much money in it, most of it unaccounted for with no one demanding results. Was there some cell within the US intelligence community that "knows all, sees all" that did not need any interference from those lesser analysts such as myself? Has the US intelligence community actually become its own "Wilderness of Mirrors" that so worried the CIA's James Jesus Angleton in the 1960s?¹⁵⁷ As to what lay beneath the mountain, no one, more than 60 years after the events of December 1950, ever reached a solid conclusion.

There are times, when I still wonder.

¹⁵⁷ Martin, David C. *Wilderness of Mirrors: Intrigue, Deception, and the Secrets that Destroyed Two of the Cold War's Most Important Agents*. New York: Harper & Row, 1980; Boston:

BIBLIOGRAPHY

- Adams, Scott. *Manager's Journal: The Dilbert Principle*. The Wall Street Journal, 5/22/95.
- Air Strikes May Have Hit Red Atom Plants*. Tokyo, Aug. 23 (Wednesday) (INS). Long Beach Independent. Long Beach 12, California. Wednesday, Aug. 23, 1950. Vol 12. No 339
- Appleman, Roy R. *East of Chosin: Entrapment and Breakout in Korea, 1950*. Texas A&M University Press. College Station. Third Printing. 1991.
- Blair, Clay. *The Forgotten War. America in Korea. 1950-1953*. Times Books. Random House. New York. 1987:
- Captured Red Korean Tells of Uranium Sent to Russia*. Walla Walla Union-Bulletin. Evening Edition. 4 May 1951;
- Carmin, Charlie. "MEMOIRS OF A CHOSIN VETERAN." Ellinwood, KS- Korean War Veteran of the United States Marine Corps. The Korean War Educator. <http://koreanwar-educator.org/memoirs/carmin/index.htm>
- CHANGJIN JOURNAL CHANGJIN JOURNAL 02.28.03. <http://bobrowen.com/nymas/Changjinjournal030228.html>
- Command Report: 1 thru 11 December 1950* (3rd Battalion, 31st Inf). RCT 31. 11 March 50. US National Archives, Adelphi, Maryland.
- Dees, Bowen C. *The Allied Occupation and Japan's Economic Miracle*. Curzon Press Ltd. The Japan Library. 1997
- Demick, Barbara. *The unpalatable appetites of Kim Jong-il. While his people are left to subsist on boiled grass and ground tree bark, North Korea's leader Kim Jong-il indulges shamelessly in only the world's finest food and wines*. 08 Oct 2011. <http://www.telegraph.co.uk/news/worldnews/asia/northkorea/8809102/The-unpalatable-appetites-of-Kim-Jong-il.html>
- Document No. 42 Telegram, Embassy of Hungary in North Korea to the Hungarian Foreign Ministry* 17 February 1979 cited in Szalontai, Balazs and Sergey Radchenko. *North Korea's Efforts to Acquire Nuclear Technology and Nuclear Weapons: Evidence from Russian and Hungarian Archives*. August 2006. https://www.wilsoncenter.org/sites/default/files/WP53_web_final1.pdf
- DPRK Scientist Yi Sung-ki Profiled*. Tojyo Gendai Chosen no Kagakushatachi. 18 February 1997
- Evanhoe, Ed. *Dark Moon, Eighth Army Special Operations in the Korean War*. Naval Institute Special Warfare Series. Annapolis Maryland. 1995.
- Goudsmit, Samuel A. *Alsos*. American Institute of Physics. Woodbury, New York. 1947/1996.
- Hammel, Eric. *Chosin: Heroic Ordeal of the Korean War*. Presidio. Novato, CA 1981
- Hammel, Eric. *Korean War: Death of Task Force Drysdale*. MILITARY HISTORY. 6/12/2006. <HTTP://WWW.HISTORYNET.COM/KOREAN-WAR-DEATH-OF-TASK-FORCE-DRYSDALE.HTM>
- Henshall, Philip. *The Nuclear Axis: Germany, Japan and the Atom Bomb Race, 1939-1945*. Stroud, Sutton. 2000.
- Hoyt, Edwin P. *On to the Yalu*. Stein and Day, New York. 1984
- Identify Ore Plant in Korea*. Waterloo Daily Courier. Waterloo, Iowa, Wednesday, October 25, 1950
- Is N Korea's famine causing people to eat their children? Reports of murder and cannibalism coming out of rogue state are deemed 'credible'*. The Week. 28 January 2013. <http://www.theweek.co.uk/world-news/north-korea/51230/n-koreas-famine-causing-people-eat-their-children>
- Justice, Glenn. *Fightin' George' Light Infantry*. Justpub Company. Bainbridge, Georgia. 2001.

Draft

Kerr, Paul. *N. Korea's Uranium-Enrichment Efforts Shrouded in Mystery*. Published on Arms Control Association. 1 May 2003. <http://www.armscontrol.org> at <http://www.armscontrol.org/print/1286>

Kestner Sr, Franklin D.R. *"To the Last Man!" Kulbes' Mongrels at the Chosin Reservoir: Korea, 1950*. Westernlore Press, Tucson, Arizona. 1991

Korean War: Death of Task Force Drysdale. 6/12/2006 • MILITARY HISTORY
<http://www.historynet.com/korean-war-death-of-task-force-drysdale.htm>

LEE, PETER. *The Bombing of the Chinese Embassy in Belgrade in 1999, Reconsidered*. Counterpunch. May 25, 2015. <http://www.counterpunch.org/2015/05/25/the-bombing-of-the-chinese-embassy-in-belgrade-in-1999-reconsidered/>

Martin, David C. *Wilderness of Mirrors: Intrigue, Deception, and the Secrets that Destroyed Two of the Cold War's Most Important Agents*. New York: Harper & Row, 1980.

McCullough, David. *Truman*. Simon & Schuster. New York. 1992.

Mossman, Billy C. *Ebb and Flow*. November 1950-July 1951. Center of Military History. United States Army. Washington D.C. 1990

Mylar, Joseph L. *Might Be Uranium Processing Plant*. Page Two. Section B. Santa Fe, New Mexican, 26 October 1950;

North Korea and Nuclear Weapons: The Declassified U.S. Record. National Security Archive Electronic Briefing Book No. 87. Edited by Robert A. Wampler. April 25, 2003. <http://nsarchive.gwu.edu/NSAEBB/NSAEBB87/>

North Korea gives U.S. access to suspected n-weapons site. Wednesday, March 17, 1999. Lubbock Avalanche-Journal. http://lubbockonline.com/stories/031799/wor_031799095.shtml#.VspxPJwrKM8

Office of Strategic Services, China Theater. X-2 Branch. Report. *Ramona*. Record Group 226. Stack Area 250. Row 64 Compartment 33. Shelf 2. Entry 211. Box 34. The US National Archives and Records Administration, 8601 Adelphi Road, College Park, MD.

Paik, Hak Soon. *The Kumchangni Inspection and Perry's Visit to North Korea.*, Sejong Institute, Policy Forum Online., Nautilus of America/The Nautilus Institute. 1999

Radioactive Waste Removal – Krasnoufimsk, Russia. Pure Earth. <http://www.pureearth.org/project/krasnoufimsk-radioactive-waste-removal/>

Rasula, George A. *THE CHOSIN CHRONOLOGY Battle of the Changjin Reservoir, 1950*. 2006

Record Group 319: Records of the Army Staff, National Archives. Adelphi Maryland.

Roe, Pat. *General O. P Smith Interview*. <http://www.chosinreservoir.com/smithinterview.htm>

SANGER. DAVID E. August 16-22; *Underground Site May Hide North Korean Nuclear Reactor*. The New York Times. Published: August 23, 1998. <http://www.nytimes.com/1998/08/23/weekinreview/august-16-22-underground-site-may-hide-north-korean-nuclear-reactor.html>

Scalia, Joseph Mark. *Germany's Last Mission to Japan: The Failed Voyage of U-234*. Naval Institute Press, Annapolis, Maryland. 2000

Shoemaker, Thomas M. *The Lineman's and Cableman's Field Manual* P.E., B.S.E.E. Second Edition. McGraw-Hill. New York, 2009.

Draft

Sigal, Leon V. *U.S. Failures in North Korea*. The National Interest. 22 February 2012.
<http://nationalinterest.org/commentary/us-failures-north-korea-6554>

Simmons, Edwin H. Brigadier General. *Frozen Chosin, U.S. Marines at the Changjin Reservoir*. Marines in the Korean War Commemorative Series. Washington Navy Yard. Washington D.C. 2002

Snell, David. *Japan Developed Atom Bomb; Russia Grabbed Scientists*. Constitution. Atlanta, Georgia. 3 Oct 1946.

Spurr, Russell. *Enter the Dragon: China's Undeclared War against the U.S. in Korea, 1950-51*. Newmarket Press, New York. 1988

Staff Operations: The X Corps in Korea, December 1950

Stanton, Shelby L. *America's Tenth Legion: X Corps in Korea, 1950*. Presidio. Novato, CA. 1989.

Stewart, Richard. *The Korean War: The Chinese Intervention*, 3 November 1950-24 January 1951. The Department of Defense, Army, Center of Military History. 1995

Stratemeyer, George. *The Three Wars of Lt. Gen. George E. Stratemeyer. His Korean War Diary*. Edited by William T. Y'Blood. Air Force History and Museums Program. 1999.

Stutzman, David. *SOLDIERS' STORIES VOLUME II, Volume 2*. 2015

"Substance of Statements made at Wake Island Conference, dated 15 October 1950, compiled by General of the Army Omar N. Bradley, Chairman of the Joint Chiefs of Staff, from notes kept by the conferees from Washington. Papers of George M. Elsey." Harry S. Truman Presidential Library and Museum. Retrieved 7 September 2011.

Szalontai, Balazs and Sergey Radchenko. *North Korea's Efforts to Acquire Nuclear Technology and Nuclear Weapons: Evidence from Russian and Hungarian Archives*. August 2006.

https://www.wilsoncenter.org/sites/default/files/WP53_web_final1.pdf

Telecon interview with Blas Luis "Mike" Nazario, 2003.

Telecon with George Rasula, 2005.

Telecon, Glenn Justice, about 2005.

Telecon interview with retired Colonel Robert Ellis Jones, US Army.2003.

Telecon interview with retired Brigadier General Edwin H. Simmons, US Marine Corps. 2003.

The Iran-North Korea Axis of Atomic Weapons? 13th August 2015 - Forbes.

<http://www.defenddemocracy.org/media-hit/claudia-rosett-the-iran-north-korea-axis-of-atomic-weapons/>

Thompson, Robert Smith. *Empires on the Pacific: World War II and the Struggle for Mastery of Asia*. Basic Books. 2001.

Toland, John. *In Mortal Combat: Korea, 1950-1953*. William Morrow and Company, Inc. New York. 1991.

US Is Unexcited By Soviet Atom Plant in Korea. The Modesto Bee, Thursday, 26 October 1950, etc.

Vallowe, Ray. *What History Failed to Record, A Phantom Force – Lost to History*. 2015, available at:
http://koreanwar-educator.org/topics/chosin/vallowe_research/vallowe_ray_book.pdf

Draft

Was It a Baby Milk Factory? Washington Post. 1998. <http://www.washingtonpost.com/wp-srv/inatl/longterm/fogofwar/vignettes/v4.htm>

Wilcox, Robert K. *Japan's Secret War: Japan's Race against Time to build its Own Atomic Bomb*. Marlowe & Company, New York. Copyright 1995.

With the Marines: Chosin to Hungnam. U.S. Department of Defense documentary film. 1951.

Zoroya, Gregg. *How the IED changed the U.S. military*. USA Today. 19 December 2013. <http://www.usatoday.com/story/news/nation/2013/12/18/ied-10-years-blast-wounds-amputations/3803017/>

The President's News Conference. November 30, 1950. Harry S. Truman Library and Museum. <http://trumanlibrary.org/publicpapers/viewpapers.php?pid=985>

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